XVI World Water Congress

CONAGUA
COMISIÓN NACIONAL DEL AGUA

IWRA

ANEAS
Asociación Nacional de Empresas de Agua y Saneamiento de México A.C.

XVI World Water Congress

May 29th – June 3rd 2017

Cancun, Mexico

www.worldwatercongress.com

@WWCongress #WWCXVI #WWCongress

https://www.facebook.com/WWCongress

Download the XVI World Water Congress App from Play Store on Android and App Store on IOS, or access it online (https://meetmaps.com/app/join.php?p=MzYxNw) by entering the code “wwc” and creating your account to connect with other participants, extend your network, create your agenda or be notified of the latest Congress updates among many others

“In partnership with the World Water Council, the 8th World Water Forum and Inter-American Development Bank (IDB), and supported by Texas A&M University School of Law, Agence Française pour la Biodiversité and Taylor & Francis Group.”

INDEX

MESSAGE FROM THE IWRA PRESIDENT 1

MESSAGE FROM THE NATIONAL WATER AUTHORITY 2

GENERAL PROGRAM OVERVIEW 3

BRIEF DESCRIPTION OF PLENARY SESSIONS 8

REGULAR SESSIONS 14

SPECIAL SESSIONS 26

POSTER SESSIONS 34

CANCUN CENTER 38

XVI
World Water Congress
International Water Resources Association (IWRA)
Cancun, Quintana Roo, Mexico. May 29th - June 3rd 2017.

Message from the IWRA President

PATRICK LAVARDE

President of the International Water Resources Association

> **"The IWRA World Water Congress is a meeting place to share experiences, promote discussion, and present new knowledge, research results and new developments in the fields of water sciences and policy around the world."**

Following the success of over 40 years of World Water Congresses around the world, I am pleased to invite you to the 16th edition of this famous and prestigious triennial water event in Cancun, Mexico from May 29th to June 3rd 2017.

Since its creation in 1971, IWRA has always strived to lead global thinking on water resources management. The World Water Congress is the platform that IWRA provides for you to present your perspectives to the world on important matters. In 2017, the main theme of the Congress will be "Bridging Science and Policy". This comes at a critical moment in water resources management around the world. Water is now increasingly recognised in the COP processes as a key component in climate change adaptation. The UN Sustainable Development Goals have a dedicated focus on water. The 8th World Water Forum is mobilising global stakeholders to work on water issues around the world. In this dynamic context, the IWRA World Water Congress is a unique opportunity for water policy making and management to build closer ties with multi-disciplinary water sciences in order to improve decision making in an uncertain world.

The IWRA World Water Congress is a meeting place to share experiences, promote discussion, and present new knowledge, research results and new developments in the fields of water sciences and policy around the world. Importantly, in this 16th edition of the Congress and in partnership with our hosts in Mexico (CONAGUA and ANEAS), we are looking to move science further, move policy making further - by bringing policy makers and knowledge makers together. The Congress aims to create a concrete, dynamic and fruitful meeting of the scientific and policy communities to make a real impact on water resources management around the world.

Message from the National Water Authority

ROBERTO RAMÍREZ DE LA PARRA

Director General of National Water Commission of Mexico - Conagua

"I thank you for joining us at the World Water Congress, and participating in this important process, helping to bridge the gap between science and policy.

I hope you enjoy your time at the Congress in Cancun!"

There is no single resource more fundamental and comprehensive for health, development and prosperity than water. Its importance makes it a strategic, crosscutting and multisectoral element required by all human activities, it is undoubtedly the driving force behind our development.

Nonetheless, we must recognise that the climate change effects largely undermine the hydrological cycle behaviour in our basins, by increasing the natural vulnerability of some and creating new water risks in others.
Every year Mexico experiences these climate changes, from severe droughts to increasingly severe and destructive tropical cyclones. Which is why, President Enrique Peña Nieto is driving new public policies based on technical and scientific knowledge to guide the decision-making process and for our hydraulic sector to move from a reactive scheme in the face of disasters, to one of risk prevention, mitigation and management.

As part of this new vision on water, the President of Mexico presented during the 69th session of the UN General Assembly in 2014, the initiative to create the Intergovernmental Panel on Water, a body of the highest level, dedicated to develop work combining the technical and political part to generate better adaptation and resilience capacities. Its creation was announced on January 21st, 2016 in Davos, Switzerland by UN Secretary General and the President of the World Bank Group.

Which is why, following the same line of work based on water cooperation, sharing successful cases and jointly seeking the solutions to water challenges faced by our nations, Mexico shall welcome the members of the International Water Resources Association (IWRA) in 2017 to hold the 16th World Water Congress, having as one of its main objectives to contribute to create a specialised platform of technical and scientific tools and instruments, strengthened by the participation of decision-makers as managers of public policies.

I am certain this forum represents a great opportunity to share work and learning experiences on mutual benefits, I hope the outcomes of this Congress to be transformed into benefits for our nations.

Lastly, I welcome all members of this renowned and prestigious organisation to a land of an incredible natural beauty and hydrology, which makes it one of the most visited tourist destinations worldwide: Cancun, Quintana Roo. Welcome to Cancun! Welcome to Mexico!

Lunes / Monday 29

General Program Overview

Hours	Salon Gran Cancun	Cozumel 1	Cozumel 2	Cozumel 3	Cozumel 4	Cozumel 5	Xcaret	Salon Isla Mujeres	Coba
9:30 - 12:20	Opening Ceremony								
12:40 - 14:10	HLP: Water and the SDGs								
Lunch*									
15:30 - 17:00		RS-1. Water Security in a Changing World: Alternative Sources of Water	SS-13: Towards a special issue of Water International on the OECD Principles on Water Governance	RS-2. Bridging Science and Policy	SS-49(A): Presentation of the online Training Course on the « Greening » of Water Law: Implementing environment-friendly principles in contemporary water treaties and laws	SS-56: Innovative water resources management and green development in China	SS-63(A): The National Water Reserves Program in Mexico: allocation of water for the environment and accomplishment of multiple SDG	RS-8. Water Security in a Changing World: Conflict and Cooperation	SS-45: Water in the World We Want - policy and planning for accelerated SDG success
17:20 - 18:50		RS-10. Water Security in a Changing World: Managing Risks	SS-79: 2nd Water Business Forum 2017	RS-39. Water and Sustainable Growth: Water-Energy Nexus	SS-49(B): Presentation of the online Training Course on the « Greening » of Water Law: Implementing environment-friendly principles in contemporary water treaties and laws	SS-18: Understanding water Security in cities: empirical evidence and policy implications	SS-63(B): The National Water Reserves Program in Mexico: allocation of water for the environment and accomplishment of multiple SDG	RS-5. Water Security in a Changing World: Climate Change	RS-3. Building Capacity

*Poster Session

Martes / Tuesday 30

General Program Overview

Hours	Salon Gran Cancun	Cozumel 1	Cozumel 2	Cozumel 3	Cozumel 4	Cozumel 5	Xcaret	Salon Isla Mujeres	Coba
9:00 - 10:30		RS-4. Building Capacity	SS-55(A): Shared Waters of North America: Scientific water resources assessment	RS-7. Water Security in a Changing World: Climate Change	SS-75. Peace for Water: The Global High Level Panel on Water and Peace's Vision	SS-71: Making investments on multi-purpose water infrastructure fit to finance	SS-60: Capacity building in the water sector: Creating and developing training centers for water professionals	RS-23. Water Ecosystems and Physical Regimes: Groundwater Resources	SS-10: Smart Water Management (SWM): Bridge to WGG & SDGs - the technological innovation needed for "Water for all"
10:50 - 12:20	HLP: Water and Climate								
12:40 - 14:10	HLP: Water and Business								
Lunch*									
15:30 - 17:00		RS-37. Water Sanitation and Health	SS-55(B): Shared Waters of North America: Policies and Issues on Transboundary Water Resources	RS-9. Water Security in a Changing World: Confilct and Cooperation	SS-41(A): Water Security in the Americas	SS-61: The Legacy of COP22: Implementing the Global Climate Action Agenda in the water sector	SS-27: Case Studies in the Challenges of Water Sharing Between "Upstreamers" and "Downstreamers"	RS-19. Water Policy and Governance: Transboundary Aquifers Law and Policy	
17:20 - 18:50		RS-12. Water, Sanitation, and Health: Ensuring Drinking Water	SS-55(C): Shared Waters of North America: Integration of Science and Policy Cooperation	RS-13. Water Policy and Governance: Economics of Water Governance	SS-41(B): Water security in the Americas	SS-46: Building a Green Infrastructure Agenda for the Latin American Water Sector	RS-17. Water Policy and Governance	SS-73. The First Asia International Water Week: Asia Solution for Water	

*Poster Session

Miércoles / Wednesday 31

General Program Overview

Hours	Salon Gran Cancun	Cozumel 1	Cozumel 2	Cozumel 3	Cozumel 4	Cozumel 5	Xcaret	Salon Isla Mujeres	Coba
9:00 - 10:30		RS-24. Water and Sustainable Growth: Irrigation	SS-26: Reflecting on Regulating Water Security for Unconventional Gas and Oil	RS-34. Water Quality Management	SS-35(A): Multi-disciplinary perspectives on the Grand Ethiopian Renaissance Dam (GERD) and the future of water resources management and development in the Eastern Nile Basin	SS-76: Towards a Green Infrastructure in Latin America and the Caribbean	SS-65(A): Water Security and Climate Change - Challenges and Opportunities in Asia	RS-14. Water Policy and Governance: Economics of Water Governance	RS-21. Water Policy and Governance: Transboundary Aquifers on the Mexico-US Border
10:50 - 12:20		RS-30. Water Quality: Contaminants of Emerging Concern	SS-30 Social Sciences approach to supporting stakeholder engagement for water policy development	RS-26. Water Policy and Governance: Regional and International Law	SS-35(B): Multi-disciplinary perspectives on the Grand Ethiopian Renaissance Dam (GERD) and the future of water resources management and development in the Eastern Nile Basin	SS-77: Achieving Water and Sanitation SDGs in Latin America and the Caribbean	SS-65(B): Water Security and Climate Change - Challenges and Oportunities in Asia	RS-41. Water and Sustainable Growth: Water-Food-Energy Nexu	SS-53: The Draft Articles on the Law of Transboundary Aquifers – Moving forward until the next UN General Assembly session
12:40 - 14:10	HLP: Integrated Water Resources Management								
Lunch*									
15:30 - 17:00			SS-25(A): Water Quality Management – identifying opportunities for policy reform	RS-6. Water Security in a Changing World: Climate Change		SS-48: Two Countries, Nine States: Colorado River Cooperation in a Complex System	SS-16(A): What next for water law and policy? Recent developments, future challenges and potential opportunities	SS-21(A): Water security and global-change adaptation: bridging science and policy	SS-34 (A): Bridging Stakeholders' Knowledge and the 8th World Water Forum Thematic Framework
17:20 - 18:50		RS-18. Water Policy and Governance	SS-25(B): Water Quality Management – identifying opportunities for policy reform	RS-32. Water Ecosystems and Physical Regimes	SS-17: Empowering Young Water Professionals through Engagement in Global Water Community	RS-29. Water Security in a Changing World: Cooperation on the Mexico-US Border	SS-16(B): What next for water law and policy? Recent developments, future challenges and potential opportunities	SS-21(B): Water security and global-change adaptation: bridging science and policy	SS-34 (B): Bridging Stakeholders' Knowledge and the 8th World Water Forum Thematic Framework
19:00 - 20:30						Open Discussion - Preparation of Cancun Declaration			

*Poster Session

Jueves / Thursday 1

General Program Overview

Hours	Salon Gran Cancun	Cozumel 1	Cozumel 2	Cozumel 3	Cozumel 4	Cozumel 5	Xcaret	Salon Isla Mujeres	Coba
9:00 - 10:30		RS-16. Water Ecosystems and Physical Regimes	SS-58(A): Training in Hydro-diplomacy: Legal and Institutional Aspects of Water Resources Governance – From the International to the Domestic Perspective	RS-27. Water Policy and Governance: Law	SS-72: Cooperation and Exchange of Experience in Water Resource Management and Adaption to Climate Change	SS-33(A): Resilience of coastal watersheds in Latin America and the Caribbean	SS-54: Water Futures and Solutions	RS-33. Water Quality: Managing Contamination	
10:50 - 12:20		RS-31. Water Quality Management	SS-58(B): Training in Hydro-diplomacy: Legal and Institutional Aspects of Water Resources Governance – From the International to the Domestic Perspective	RS-25. Water Policy and Governance: Integrated Water Management	SS-43: Hydropower Development and Reservoir Operation	SS-33(B): Resilience of coastal watersheds in Latin America and the Caribbean	SS-36: Water stress and demographic dynamics	RS-15. Water Ecosystems and Physical Regimes	
12:40 - 14:10	HLP: From WEF Nexus to WEF+Health +Education Nexus								
Lunch*									
15:30 - 17:00	IWRA Awards								
17:20 - 18:50		SS-74: Getting to a Water Security Framework: Breaking it Down to Build it Up	SS-52: Offshore Aquifers – Why Should We Care ?	RS-22. Water Ecosystems and Physical Regimes: Groundwater Resources	SS-8: Charges vs. buyback: who pays for water ecosystems restoration?	SS-64: Towards an Integrated Water Management by Sub-basin: Mainstreaming of Science and Policy	SS-38: Water security issues for developing countries in changing environment	RS-28. Water Policy and Governance: Law	

*Poster Session

Viernes / Friday 2

General Program Overview

Hours	Salon Gran Cancun	Cozumel 1	Cozumel 2	Cozumel 3	Cozumel 4	Cozumel 5	Xcaret	Salon Isla Mujeres	Coba
9:00 - 10:30			SS-23(A): Enhancing irrigation productivity and profitability in small scale irrigation schemes lessons from three continents	RS-11. Water Security in a Changing World: Managing Risks	SS-11: Understanding the Forest-Water Nexus: a new global monitoring framework and tool	SS-5: Regulation and Transparency for Water and Sanitation Services in countries with lack of them	SS-62: Towards SDG implementation – ensuring water quality from source to sea	RS-38. Stakeholder Participation	SS-42(A): The scientific underpinnings of global water law instruments: the UN Watercourses Convention, the UNECE Water Convention, and ILC Draft Articles on Transboundary Aquifers
10:50 - 12:20		RS-40. Water and Sustainable Growth: Water-Food-Energy Nexus	SS-23(B): Enhancing irrigation productivity and profitability in small scale irrigation schemes lessons from three continents	RS-42. Water and Sustainable Growth	RS-36. Water Sanitation and Health	SS-67: A "ts' ono' ot" cosmovision: Interdisciplinary science and policy in the Yucatan Peninsula's sinkholes	SS-44: Sustainable Watersheds: Emerging Economic Instruments for Eater Security	SS-78: Introducing the World Water Data Initiative: How water data can help achieve the Sustainable Development Goals	SS-42(B): The scientific underpinnings of global water law instruments: the UN Watercourses Convention, the UNECE Water Convention, and ILC Draft Articles on Transboundary Aquifers
12:40 - 14:10	Closing Ceremony								
Lunch*									
15:30 - 17:00	IWRA General Assembly								

*Poster Session

BRIEF DESCRIPTION OF PLENARY SESSIONS

• OPENING CEREMONY •

Monday, May 29th, 2017
Gran Cancun Room
9:30 – 12:20 hrs

Welcome speeches

Opening by the Congress co-chairs
- Mr. Carlos Joaquin Gonzalez, Governor, Quintana Roo
- Mr. Patrick Lavarde, President, IWRA
- Mr. Ramon Aguirre, President, ANEAS
-Mr. Roberto Ramírez de la Parra, Director General, CONAGUA
- H.E. Mr. Rafael Pacchiano Alaman, Minister, Ministry of Environment and Natural Resources, Mexico

Keynote speeches

- H.E. Mr. Benedito Braga, President, World Water Council & State Secretary, Sao Paulo State, Brazil
- H.E. Mr. Guihua Lu, Vice-Minister for Water Resources, People's Republic of China
- H.E. Mr. Diene Faye, State Secretary for Hydraulics, Senegal
- Mr. Haksoo Lee, President, Asia Water Council
- Mr. Tony Slatyer, Special Adviser on Water, Department of Foreign Affairs and Trade, Australia
- Mr. Torgny Holmgren, Executive Director, Stockholm International Water Institute
- Mr. Paulo Salles, Co-Chair, 8th World Water Forum

Closing remarks and Congress introduction

- Mr. Gabriel Eckstein, Chair, XVI World Water Congress International Scientific Committee

• HIGH-LEVEL PANELS •

High-Level Panel: Water and the Sustainable Development Goals
Monday, May 29th, 2017
12:40 – 14:10 hrs, Gran Cancun Room

The purpose of the Panel is to address the role of water in SDG implementation from diferent perspectives in light of the 2030 Agenda for Sustainable Development, and make recommendations for actions to be taken - what, when and by whom. The Panel is not intended simply as an "event", but rather as an important milestone in a process of strategy development and alliance-building among key stakeholders that will continue at subsequent key events, including Stockolm World Water Week in 2017 and 8th World Water Forum in 2018.

Speakers:
•Aziza Akhmouch, Head, Water Governance Program, OECD
•Sergio Campos, Head, Water and Sanitation, Inter-American Development Bank (IDB)
•Jose Carrera, Vice President, Development Bank of Latin America (CAF)
•Torgny Holmgren, Executive Director, Stockholm International Water Institute (SIWI)
•Karin Krchnak, Director, Freshwater Program, WWF
•Federico Properzi, Chief Technical Adviser, UN-Water
•Roberto Ramirez de la Parra, Director General, CONAGUA

Moderator: Torkil Jønch Clausen, Chair of the Scientific Programme Committee for the World Water Week, Senior Adviser to the Global Water Partnership and Chair of the Thematic Commission of the 8th World Water Forum, Denmark.

High-Level Panel: Water and Climate
Tuesday, May 30th, 2017
10:50 – 12:20 hrs, Gran Cancun Room

The purpose of the Panel is to consider how to further promote the importance of water management in the Climate Change COP process when dealing with the challenges posed by climatic changes, with a particular focus on climate change adaptation. It will also consider implementation of the Global Climate Action Agenda through different concrete actions and projects, and will propose recommendations for actions to be taken. The Panel is intended as part of the broader process that aims to bring together key actors to further strengthen and build an alliance for water and climate

• HIGH-LEVEL PANELS •

change issues, positioning itself as a key stepping stone between COP 22 and 23, and leading to the 8th World Water Forum in 2018.

Speakers:
•Dogan Altinbilek, Vice-President, World Water Council, IWRA Past President
•Eugenio Barrios, Director of the Water Programme, WWF, Mexico
•Jean-Didier Berthault, Vice-President, Paris Region Sanitation Corporation (the Megacities Alliance for Water and Climate)
•Jose Carrera, Vice-President, Social Development, Development Bank of Latin America (CAF)
•Jean-François Donzier, Executive Secretary, International Network of Basin Organizations (the Global Alliance for Water and Climate)
•Neil Grigg, Professor, Colorado State University, United States
•Jason Morrison, Head, CEO Water Mandate UN Global Compact (the Business Alliance for Water and Climate)

Moderator: Cecilia Tortajada, Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore and Past President of IWRA, Singapore.

High-Level Panel: Water and Business
"New paradigms for the water sector's contribution to the SDGs"
Tuesday, May 30th, 2017
12:40 – 14:10 hrs, Gran Cancun Room

The purpose of the Panel is to address the mobilization of the private and public companies involved in the water sector for the implementation of the SDGs, innovative solutions that could be developed in the coming years, new opportunities for innovation, and how innovation and creativity could be encouraged by national and international authorities. The panel will consider issues such as: major innovations that could contribute significantly to the achievement of the SDGs, the main gaps to be bridged, existing and potential alliances among stakeholders that will help implement sustainable solutions, and the changes from "business-as-usual" that are needed to achieve the 2030 Agenda for Sustainable Development.

Speakers:
•Ramon Aguirre Diaz, Director General, Mexico City Water Company-Sacmex, Mexico
•Diane d'Arras, Director, Suez, France & President, International Water Association
•Hak-Soo Lee, President, K-Water, South Korea
•Jason Morrison, Head, UN Global Compact CEO Water Mandate, United States
•Philip Gichuki, CEO, Nairobi City Water & Sewerage Company Ltd, Kenya

Moderator: Pierre-Alain Roche, President, the High Council for Environment and Sustainable Development, France.

• HIGH-LEVEL PANELS •

High-Level Panel: Integrated Water Resources Management
Wednesday, May 31th, 2017
12:40 – 14:10 hrs, Gran Cancun Room

The purpose of the Panel is to address the role of IWRM from different perspectives in light of the 2030 Agenda for Sustainable Development, and make recommendations for revitalizing IWRM toward action at all levels. The Panel is intended as part of the ongoing process of alliance-building among key stakeholders in IWRM implementation that will continue at subsequent key events, including Stockholm World Water Week in 2017 and 8th World Water Forum in 2018. The Panel will address issues such as: successes and failures in IWRM implementation over the last decade, new modalities for operationalizing IWRM, emerging issues and vectors that IWRM must address in the coming decades, and main challenges – at different levels – to achieving SDG Target 6.5 on IWRM.

Speakers:
•Benedito Braga, State Secretary for Sanitation and Water Resources, State of Sao Paulo, Brazil
•Claudia Patricia Ochoa Campuzano, Director, Centre of Science and Technology of Antioquia, Colombia
•Blanca Jiménez-Cisneros, Director, Water Resources, UNESCO
•Rabi Mohtar, Professor and Head of centre, Texas A&M University, USA
•Mark Smith, Director, Global Water Programme, International Union for Conservation of Nature
•James Spalding, Director General, Itaipu Binacional, Paraguay
•Fabiola Tábora, Executive Secretary, Global Water Partnership, Central America

Moderator: Torkil Jønch Clausen, Senior Adviser to the Global Water Partnership, Chair of the Scientific Programme Committee for the World Water Week,, Chair of the Thematic Commission of the 8th World Water Forum, Co-chair of the World Water Council Task Force on IWRM, Denmark.

High-Level Panel: The Water-Energy-Food Nexus
Thursday, June 1st, 2017
12:40 – 14:10 hrs, Gran Cancun Room

The Panel will specifically focus on the Sustainable Development Goals related to Water, Energy, and Food (SDGs 2, 6, and 7). The main objectives of the Panel are to: demonstrate the extent of the interconnections between the water, energy, and food goals, explore possible tradeoffs for implementing the SDGs and identifying a holistic assessment criteria for multiple implementation plans at different scales, and discuss ways among which the policy coherence and policy-science communication could be improved across sectors and across scales. The discussion in the Panel will start with challenges in securing adequate tools, data, modelling complexity, governance and financing, starting with the global perspective, and moving to the more local and national scales. It will build on this material by considering lessons learned from various partner institutions on the potential and risks of adopting the Water, Energy, and Food nexus as a platform for SDG implementation.

Speakers:
•Carl Ganter, CEO, Circle of Blue
•Astrid Hillers, Program Manager, Global Environment Facility
•Antonio Embid Irujo, Professor of Law, University of Zaragoza, Spain
•Louise Karlberg, Director, Swedish Environment Institute International, Sweden
•Liber Martin, Professor, National University of Cuyo, Argentina
•Saeed Nairizi, President, International Commission on Irrigation and Drainage
•Diego J. Rodriguez, Senior Manager, The World Bank
•Will Sarni, President, the Water Foundry LCC, United States
•Raya Stephan, International Water Lawyer, France

Moderator: Rabi Mohtar, TEES Endowed Professor at Texas AM University, USA.

• CANCUN DECLARATION WORKSHOP •

Wednesday, May 31th, 2017
19:00 – 20:30 hrs, Cozumel 5

A special open meeting will be held to contribute to the development and drafting of the Cancun Declaration.

• IWRA AWARDS CEREMONY •

Thursday, June 1st, 2017
15:30 – 17:00 hrs, Gran Cancun Room

Introduction: James E. Nickum, as Chair of the Awards Committee
- Presentation of Honorary Memberships by Asit Biswas, Founding member and Past President of IWRA
- Presentation of the Best Papers Awards by James E. Nickum, as Editor-in-Chief, Water International
- Presentation of the Crystal Drop Award by Ben Braga, President of the World Water Council and Past President of IWRA

Ven Te Chow Memorial Lecture by Prof. V.P. Singh: "Challenges in meeting water security and resilience".

Closing: James E. Nickum, Chair of the Awards Committee.

• CLOSING CEREMONY •

Friday, June 2nd, 2017
Gran Cancun
12:40 – 14:10 hrs

Congress Outcomes

•ISC Chair Report
- Mr Gabriel Eckstein, Chair, XVI World Water Congress International Scientific Committee
•Adoption of the Cancun Declaration

XVI - XVII Congress Handover

-Mr Patrick Lavarde, President of IWRA
-XVII Congress Host representatives
-Signature of the MoA and Handover Ceremony

Closing Session

- Mr. Roberto Olivares, Director General, ANEAS
- Mr. Luis Felipe Alcocer Espinosa, Deputy Director for Planning, CONAGUA
- Mr. Patrick Lavarde, President, IWRA

• SOCIAL EVENTS •

Welcome cocktail
Wednesday, May 29th, 2017
19:30 hrs.

Welcome cocktail on Monday May 29th. We expect you at the Akuma Terrace in Cancun International Convention Center at 19:30 hrs.
Dress Code: Informal.

Gala Dinner
Thursday, June 1st, 2017
19:30 hrs.

Gala Dinner at the Mandala Beach Club on Thrusday, June 1st at 19:30 hrs.
Dress Code: Gala

Technical Visit
Saturday, June 3rd, 2017

Technical visit to Aktun-Chen, a beautiful nature park in the in the heart of a tropical rainforest . Splendid views, amazing wildlife and plenty of entertainments are just and hour and a half away from our venue.

9:00 hrs - Departure from Cancun ICC.
17:00 hrs - Departure from Aktun-Chen back to Cancun ICC.

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	RS#	RS TITLE	DATE/TIME/ ROOM
Jad	Ziolkowska	Desalination Technology in the US: Potentials for Economic Growth and Sustainable Water Supply	1	Water Security in a Changing World: Alternative Sources of Water	May 29th 2017 15.30-17.00 Cozumel 1
Yoram	Eckstein	Quo Vadis Aqua Mundi? The Future of Water			
Sajjad	Ahmad	Potential of Rainwater Harvesting in meeting the domestic outdoor demand: a study in dry and wet regions of the United States			
Biju	George	Water Reuse for Irrigation in Egypt: Farmer's perceptions, knowledge and economics			
Jessica	Rodrigues Pires da Silva	Boosting direct potable reuse: measures to be taken to help shorten the knowledge gaps and uncertainties surrounding this technology			
Angelica	Gutierrez-Magness	GEO Global Water Sustainability (GEOGLOWS): Earth Observations for sustainability in water management in the Americas and around the world	2	Bridging Science and Policy	May 29th 2017 15.30-17.00 Cozumel 3
Bassel	Daher	Understanding the Science-Policy Gap: Proposing a Formal Delegation Principal - Agent Model			
Thaís	Moreira de Classe	Water Footprint Assessment: innovation tool in Brazilian water governance			
Bryan	Jenkins	Translating Science into Policy: setting nutrient limits for agricultural land use			
Alejandro	Salazar	Institutional capacity and performance in water utilities in the North of Mexico	3	Building Capacity	May 29th 2017 15.30-17.00 Coba
Pankajkumar	Sampat	Quantification of Municipal Water Supply and Role of Metering in Large Indian Cities			
Elaine	Springgay	Understanding the Forest-Water Nexus: monitoring framework and tool			
Lindsey	Aldaco-Manner	Water Education Assessment Standards: The Pipeline to Conserving Water in Urban Cities	4	Building Capacity	May 30th 2017 9.00-10.30 Cozumel 1
Tom	Arsuffi	Field Stations as Ambassadors and Agents for Bridging Silos: Engagement in Watershed Protection, Research and Natural Resource Literacy in a Land of Private Property			
Alejandra	Mayorga Rodríguez	Environmental Education for Adults based on Participatory Action Research			
Rudolph	Rosen	Future water stewardship and fact-based water policy: an aquatic science education pathway model			

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	ID ABS	RS#	RS TITLE	DATE/TIME/ ROOM
Laura	McCann	Comparison and evolution of water institutions in the U.S. Midwest		5	Water Security in a Changing World: Climate Change	May 29th 2017 17.20-18.50 Isla Mujeres
Meghan	Klasic	Water Quality and Extreme Events in the Face of Climate Change: Does science supply meet demand?				
Inom	Normatov	Modern state of the Transboundary Amudarya main tributaries				
Yukako	Tanaka	Estimation of the damage cost on compound water related disaster in Japan using 2D non-uniform flow model				
Alfredo	Ribeiro Neto	Adaptation mechanisms for extreme events in the Capibaribe River Basin - Brazil				
Maureen	Papas	Climate Change Adaptation and the Pivotal Role of Water: Proposed policy response for Australia?		6	Water Security in a Changing World: Climate Change	May 31st 2017 15.30-17.00 Cozumel 3
Saswati	Roy	Truth Behind Noah's Deluge: An Implication of Climate Change Adaptation				
Céline	Dubreuil	Mediterranean wetlands: Natural solutions to deal with climate change				
Yangwen	Jia	Challenges and Adaptive Strategies of Water Resources Change in the Yellow River Basin under the Changing Environment				
Pedro Antonio	Guido-Aldana	Criteria for the selection and design of climate change adaptation measures for Mexico				
Roberto	Ponce	Economic Evaluation of Climatic Change Impacts on Water Resources at River Basin Scale: Insights from the Vergara River Basin, Chile		7	Water Security in a Changing World: Climate Change	May 30th 2017 9.00-10.30 Cozumel 3
Layla	Lambiasi	Defining future climate conditions for a river basin in northeast Brazil: combining GCMs predictions, promoting scenario planning and embracing uncertainty				
		Estimation of the economic loss associated with the potential water scarcity due to climate change over a river basin in northeast Brazil: guiding policy making process on a tangible scientific basis				
Nidia	Tobon	Paleohydrology record of the stromatolites of the Bacalar Lagoon: new insight for climate change assessment in the Mexican Caribbean				
Hashim	Alsafi	Assessment of climate change impacts on the variability of future streamflow in a selected contributing catchment of the Australian Hydrologic Reference Stations				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE		RS#	RS TITLE	DATE/TIME/ ROOM
Christopher	Rossi	The Transboundary Dispute Over the Waters of the Silal/ Siloli (Bolivia v. Chile)		8	Water Security in a Changing World: Conflict and Cooperation	May 29th 2017 15.30-17.00 Isla Mujeres
Shawna	Moore	Changing Tides of Egyptian Hydro-Hegemony				
Ahmed	Tayia	Transboundary water conflict resolution mechanisms: toward convergence between theory and practice				
Lindsay	Sansom	U.S.-Mexico Water Cooperation and Conflict				
Yumiko	Yasuda	Stepping out of the "water-box" - Re-thinking transboundary water cooperation		9	Water Security in a Changing World: Conflict and Cooperation	May 30th 2017 15.30-17.00 Cozumel 3
Rebecca L	Farnum	Drops of Diplomacy: Questioning the Scalar Possibilities of Hydro-Diplomacy through a Moroccan Fog-Harvesting Project				
Nando	Lewis	A new framework for investigating the (in)direct role of water in civil conflict				
Dolores	Rey	Historic droughts in the UK: What can we learn to improve agricultural drought management in the future?		10	Water Security in a Changing World: Managing Risks	May 29th 2017 17.20-18.50 Cozumel 1
Steven	Nebiker	The Transition to Dynamic Reservoir Operations for Municipal Water Supply				
Oscar	Sánchez Montufar	Dam Management in Mexico Cajon de Peña Dam, Jalisco State				
Mustafa Berk	Duygu	Planning of Drought Management by Integrating Science and Policy				
Adriana Maria	Erazo Chica	Hydrological Tools for Flooding Early Warning Systems				
Daisuke	Nohara	A framework to assess effectiveness and risks of integrated reservoir operation for flood management considering ensemble hydrological prediction		11	Water Security in a Changing World: Managing Risks	June 2nd 2017 9.00-10.30 Cozumel 3
Blandine	Ouikotan	Gaps and challenges of flood risk management in West African coastal cities				
Robert	Šakić Trogrlić	Community based- flood risk management: experiences and challenges in Malawi				
Sydney	Weyand	An application of sociohydrology to predict the long-term effects of the Alberta Drainage Project on flood risk in Texas colonias				
So	Kazama	Adaptation effect for flood in whole Japan using GCMs with scenarios				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE		RS#	RS TITLE	DATE/TIME/ ROOM
Amanda	Fencl	How do we build drought resilient drinking water utilities? Learning from Californian Utilities' Drought Responses		12	Water, Sanitation, and Health: Ensuring Drinking Water	May 30th 2017 17.20-18.50 Cozumel 1
Cristian	Palma Infante	Drinking water and urban growth: analysis of the integration of the land-use and water supply planning instruments in BioBio Region, Chile.				
Juan Carlos	Tejeda-González	Strategic Environmental Assessment of an Integrated Drinking-Water Management Plan for Rural Communities at the Altiplano Potosino				
Fernando	Gumeta-Gomez	Institutional Changes and Governances of Drinking Water in Mexico				
Alex	Godoy-Faúndez	Growth and Convergence of Residential Water Consumption				
Ishita	Singh	Water Pricing and Participatory Irrigation Management under Integrated Watershed Development Project in Jammu and Kashmir, India: Experiences and Lessons Learnt		13	Water Policy and Governance: Economics of Water Governance	May 30th 2017 17.20-18.50 Cozumel 3
Ina	Thome Picoli	Water security and charging for the use of water in river basins: a case study of Sao Paulo, Brazil				
Gisselle	Vila Benites	Tariff creation processes in the Amazon: a case study from an indigenous community				
Salvador	Delgadillo	Proposal of continuous water supply systems in urban Mexico				
Felipe	Vasquez	Effect of the Functional Form on the Residential Water Demand under Block Tariffs: Estimation using Discrete-Continuous Choice Models				
José Bento	Da Rocha	Water Producer Project in the Pipiripau River Basin, Federal District - DF, Brazil		14	Water Policy and Governance: Economics of Water Governance	May 31st 2017 9.00-10.30 Isla Mujeres
Kleverton	Melo de Carvalho	Global value chains and international water security: a critical study				
Adam	Loch	Private water trade transaction costs in the MDB: an empirical assessment over time				
Alfonso	Exposito	The Microeconomics of Water Demand under Deficit Irrigation: A case study in southern Spain.				
Alex	Godoy-Faúndez	Linking Water Scarcity, Copper production and Electricity Market. The Chilean Case of interplay between greener power and uncertainty on copper prices				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE		RS#	RS TITLE	DATE/TIME/ ROOM
Noriko	Uchida	Longitudinal and Seasonal Profiles of Mass of Environmental DNA for Stream Invertebrates in Fresh Water		15	Water Ecosystems and Physical Regimes	June 1st 2017 10.50-12.20 I sla Mujeres
Julio Cesar	Quiñonez Basagoitia	Hydrological analysis of water resources reduction as arising from deforestation processes and land use change in El Salvador and strategic actions proposal				
Saswati	Roy	Developmental Strategies and its Impact on an Island's Ecosystem and Bio-diversity: A Geographical Appraisal on Little Andaman Island, Andaman Archipelago, India				
Freddy	Rey	Ecological engineering for reconciling natural hazard control and land ecological restoration in water ecosystems				
Micael	de Souza Fraga	Identification of Suitable Areas for Implementation of Eucalyptus Cultivation in the Espirito Santo State, Brazil		16	Water Ecosystems and Physical Regimes	June 1st 2017 9.00-10.30 Cozumel 1
Ts'epo Stephen Tiisetso	Sekaleli	The Impact of Eucalypts Plantation on Soil Moisture and Ground Vegetation Cover at St. Michaels in the Roma valley, Lesotho				
Judith	Ramos-Hernandez	Analysis of the vegetation-soil-water interaction and external factors on the water availability in a rain forest				
Nathália	Pivatto Erberelli	Determining the Rainfall Indices Expected in a Return Period for the Region of Guaratinguetá, SP - Brazil				
Barbara	Moreto Fim	Environmental indicators to assist sustainable intensification practices in Espírito Santo, Brazil		17	Water Policy and Governance	May 30th 2017 17.20-18.50 Xcaret
Pooja	Kapoor	Equitable distribution of potable water and realization of water charges for self sustainable water distribution systems in South East Asian countries of Cambodia, Laos, Thailand and Vietnam				
Daniel	Gilmour	Supporting Water Infrastructure Decsion Making for Sustainble Rural Communities				
Viviana	Vargas Franco	Towards a water governance index (WGI) for Andean micro-watersheds using pressure-state-response indicators and fuzzy logic system: Case study in Colombia				
Stijn	Speelman	Closing the water cycle: A comparison of the institutional settings for wastewater reuse in 4 countries with a focus on the agricultural sector				
Harris	Kuemmerle	The subnational and the international in Pakistani hydropolitics		18	Water Policy and Governance	May 31st 2017 17.20-18.50 Cozumel 1
Luis Alberto	Labra Hernandez	Use and management of water resources: linking levels of government from the bottom up and top down				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE		RS#	RS TITLE	DATE/TIME/ ROOM
Ronald	Kaiser	Use of a Preference-Feasibility System in Water Resources Planning and Decision-making		18	Water Policy and Governance	May 31st 2017 17.20-18.50 Cozumel 1
Zhuping	Sheng	Lessons learned from long term water resources plans: top down vs. bottom up				
Antti	Belinskij	Local needs at the heart of global water governance				
Christina	Fraser	What Hydrogeological Knowledge is Needed to Inform Transboundary Aquifer Policy: A Malawi Case Study		19	Water Policy and Governance: Transboundary Aquifers Law and Policy	May 30th 2017 15.30-17.00 Isla Mujeres
Pauline	Robert	Do Indigenous Peoples' Rights To Lands And Natural Resources Extend To Transboundary Aquifers Contaminated By Mining Production Within The Lake Titicaca Region?				
Bertram John	Swartz	Legal and Institutional Framework for Groundwater Regulation in the Stampriet Transboundary Aquifer System: A Case Study of Namibia				
Stefano	Burchi	The Nubian Sandstone Aquifer System (NSAS): a case of cooperation in the making				
Malcolm J.	Gander	Factors Preventing Finalization of the Draft Articles in the 2008 UNGA Resolution on the Law of Transboundary Aquifers		20	Water Policy and Governance: Transboundary Aquifers Law and Policy	May 31st 2017 15.30-17.00 Cozumel 1
Alfonso	Rivera	Approaches to implement the Regional Strategy of the Transboundary Aquifers of the Americas				
Raya Marina	Stephan	Sharing of Benefits in the Draft Articles on the Law of Transboundary Aquifers of the International Law Commission				
Lindsay	Sansom	The Hueco Bolson: A Case for Improved Transboundary Aquifer Management		21	Water Policy and Governance: Transboundary Aquifers on the Mexico-US Border	May 31st 2017 9.00-10.30 Coba
Jessica	Foster	Survey of the Rules and Regulations Applied to Ground Water within Jurisdictions along the Texas-Mexico Border and their Transboundary Implications				
Luke	Wilson	Ensuring a Conflict-Free (or at least Conflict-Friendly) Future for US-Mexico Groundwater Regulation				
Rosario	Sanchez	Aquifers Shared between Mexico and the U.S.: management perspectives and their transboundary nature				
Lemuel C.	Ramos-Arzola	Application of the aquifers management model MADA in the Cuenca Sur aquifer, Cuba		22	Water Ecosystems and Physical Regimes: Groundwater Resources	June 1st 2017 17.20-18.50 Cozumel 3
Rodrigo	Peronico	Heterogeneity effects in soil water tranferences process under unsaturated conditions in alluvial soil in the mesoscale				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE		RS#	RS TITLE	DATE/TIME/ ROOM
Laura	Rodriguez Lozada	Allende-Piedras Negras Transboundary Aquifer: An Initial Modeling Assessment		22	Water Ecosystems and Physical Regimes: Groundwater Resources	June 1st 2017 17.20-18.50 Cozumel 3
Akira	Kawamura	Clustering fluctuation patterns of groundwater levels in Tokyo caused by the Great East Japan Earthquake using self-organizing maps				
Camilo	Lesmes Fabian	Eco-efficiency Assessment of the Water Resource Management System in the Colombian territories in the Caribbean Sea		23	Water Ecosystems and Physical Regimes: Groundwater Resources	May 30th 2017 9.00-10.30 Isla Mujeres
Shawna	Moore	Artificial Recharge as the Key to Connectivity				
Eric	Garner	Factors Identifying Aquifers with a High Probability of Management Success				
Lili	Yu	Pilot Project of Groundwater Overexploitation Control in the North China				
Biju	George	Efficiency of Irrigation Water Use: A Case Study of Abu Dhabi Emirate in UAE		24	Water and Sustainable Growth: Irrigation	May 31st 2017 9.00-10.30 Cozumel 1
Sebastian	Riera	Estimation of irrigation efficiency and economic value of environmental trade-offs in grapevine production in Mendoza, Argentina				
Amy Uyen	Truong	Facing urban water challenges with integrative irrigation techniques in drought-prone areas				
Gul	Ozerol	Comparative review of the irrigation reforms in Mexico and Turkey from the perspective of science-policy interface				
Pierre-Alain	Roche	Recent progresses in French water governance		25	Water Policy and Governance: Integrated Water Management	June 1st 2017 10.50-12.20 Cozumel 3
Fabian	Drenkhan	Integrated water resources modelling under multiple drivers of change in the tropical Andes of Peru				
Martin	Quinger	A focus on groundwater in the IWRM approach improves drought preparedness in Namibia				
Nathalie	Richards	Water Users Associations in Tanzania: lessons for IWRM policy				
Goetz	Reichert	Reality Check: The Science-Policy Nexus in European Water Law		26	Water Policy and Governance: Regional and International Law	May 31st 2017 10.50-12.20 Cozumel 3
Alexander	Otte	Indigenous peoples and local communities' water rights, international law and water security				
Brett A.	Miller	Navigating the Confluence: Sources of Reconciliation Flowing Between the Human Right to Water and Economic Efficiency				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	ID ABS	RS#	RS TITLE	DATE/TIME/ ROOM
Andreas	Wendl	International Water Rights on the White Nile of the New State of South Sudan		26	Water Policy and Governance: Regional and International Law	May 31st 2017 10.50-12.20 Cozumel 3
Deborah	Curran	Indigenous and Colonial Water Stewardship in British Columbia, Canada: Practices Towards Collaborative Watershed Planning				
Jane	Cohen	C8: What Does the Dupont Litigation Have in Common With Zeno's (Arrow) Paradox, Greek Tradegy, And Doctor Who, and What Should We Learn From It?		27	Water Policy and Governance: Law	June 1st 2017 9.00-10.30 Cozumel 3
Mario	Carvajal	The Zapotillo dam construction				
Laura	Movilla Pateiro	The need to prove the existence of sufficient water resources as a prerequisite for the authorization of new urban developments: the Spanish model				
Alex	Godoy-Faúndez	Inefficient resolution of conflicts over water rights. Legal actions as a proxy of the increase in number and complexity of conflicts				
Alexandra	Campbell-Ferrari	Exploring consumer rights at the municipal water and sewer authorities				
Marcella	Nanni	Water law implementation: challenges in the Greater Horn of Africa		28	Water Policy and Governance: Law	June 1st 2017 17.20-18.50 Isla Mujeres
Stefano	Burchi	The future of domestic water law: trends and developments revisited				
Niko	Soininen	Triumphs and Failures of Adaptive Water Management in Europe				
Rhett	Larson	Forestry Management and Water Law: Comparing the Paute Basin in Ecuador and the Verde Basin in Arizona				
Deborah	Curran	Adaptive Management in Canada: Water Law Reform and Scientific Uncertainty				
Maria Elena	Ginero	The US-Mexico Border Communities Green Infrastructure Initiative		29	Water Security in a Changing World: Cooperation on the Mexico-US Border	May 31st 2017 17.20-18.50 Cozumel 5
Wayne	Belzer	Binational efforts to improve water quality along the U.S -Mexico border				
Felipe	Vazquez	The Evaluation of the Impact of Basic Sanitation Infrustructure at the US-Mexico Border				
Suzanne	Tillery	Improving Binational Water Management Policy Through Science				

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	RS#	RS TITLE	DATE/TIME/ ROOM
Birte	Hensen	Environmental Fate and Behavior of Transformation Products of Pesticides used in Agricultural and Urban Areas	30	Water Quality: Contaminants of Emerging Concern	May 31st 2017 10:50-12:20 Cozumel 1
Esra	Şıltu	Developing a Perspective for Management of Endocrine Disrupting Compounds in Water Resources			
Jane	Cohen	Are the Times A Changin? Roots and Shoots in the Regulation of PCPs			
Edward	Acheampong	Mathematical Modelling of Uncertainty and Pharmaceutical Drug Processing in Wastewater Treatment			
Inom	Normatov	Risk Assessment and Risk Management of accumulation of chemical pollution in seasonal snow and glaciers and their transportation by waterways	31	Water Quality Management	June 1st 2017 10.50-12.20 Cozumel 1
Kevin	Wagner	Using Bacterial Source Tracking to Develop Watershed Restoration Plans			
Rachel	Gomes	Simultaneous Analysis including Non-Targeted Approaches for Bioactive Chemicals in Wastewater from the United Kingdom using Liquid Chromatography			
Ramón	Merino Loo	Optimization of activated sludge process through energy saving			
Luis Manuel	Martinez Rivera	Spatial and temporal analysis of water pollution in Cajitlán Lake, Jalisco, Mexico	32	Water Ecosystems and Physical Regimes	May 31st 2017 17.20-18.50 Cozumel 3
Rebeca	Gonzalez-Villela	Holistic approach to catchment management, conservation and recuperation of freshwaters. Case Study			
Yang	Fang	The water environmental governance for tidal lakes based on water ecology model			
Mariela	Yevenes	Seasonal impact of a mega-drought (2010-2015) on the water quality of Biobío river, Central Chile			
Pilar	Saldaña	Managing water quality in transboundary river			
Shivaraju	Harikaranahalli Puttaiah	Demonstration of Carbon based Multi-functional and Affordable Water Filters: a Sustainable and Compact Drinking Water Facilities for Rural India	33	Water Quality: Managing Contamination	June 1st 2017 9.00-10.30 Isla Mujeres
Stefanie	Wieck	Limitations of regulatory risk assessments of chemicals			
Margarita	Loredo-Cancino	Synthesis and characterization of zinc and cupper MOFs derived from diazo and oxim ligands for wastewater treatment			
Kristoffer	Still	Evaluating Enzyme Performance in the Face of Process or Water Matrix Complexity and Variability			

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	RS#	RS TITLE	DATE/TIME/ ROOM
Aybala	Koç Orhon	Identification of River Basin Specific Pollutants and Derivation of Environmental Quality Standards under Water Framework Directive: Turkish Experience	34	Water Quality Management	May 31st 2017 9.00-10.30 Cozumel 3
Lucas	Gregory	Application of Consistent Contact Recreation Water Quality Standards Across Hydrological Extremes: Reasonable or Ridiculous?			
Humeyra	Bahceci	Research on Biological Indices for Ecological Assessment of Water Bodies in Turkey			
Viviana	Vargas Franco	Towards a water quality index (WQI) for Andean micro-watersheds using pressure-state-response indicators and fuzzy logic system. Study case in Colombia			
Diane	Boellstorff	Changing Approaches to Water Quality Assessment and Watershed Management through Quantitative Microbial Risk Assessment in Texas, USA			
George	Campos	Microbiological Quality of Water Wells Communities Area Itaqui Are the Municipality of Bacanga São LUIS - MA	36	Water Sanitation and Health	June 2nd 2017 10.50-12.20 Cozumel 4
Jake	Larsson	A Low-Cost Hydration Indicator for Urinals in Developing Countries			
Vinay Singh	Baghel	Microbiological Assessment of Ganga River, India			
Romulo Henrique	Teixeira do Egito	The pollution of Brazilian urban rivers, a study about Rio das Bombas river, João Pessoa/Paraíba-Brazil			
Esthela	Sotelo	Domestic Water Access and Periurban Poverty in the Metropolitan Zone of Mexico City: What Can We Learn To Improve Water Access Policy Decisions?			
Tara	Zolnikov	A qualitative study on the interconnected nature of HIV, water, and family	37	Water Sanitation and Health	May 3Oth 2017 15.30-17.00 Cozumel 1
Ross	Tierney	Design challenges and recommendations for the user interface of low-water toilets in urban environments			
Rafaella	Oliveira Baracho	Municipal Sanitation Plans in Brazil: Analysis of Plans and Recommendations to improve planning sanitation in Brazil			
Jaiza	Leite Lima	Situational study of the drinking water quality in Quilombola communities in the municipality of São Luís Gonzaga, MA, Brazil			
Vanessa	Cruvinel	Water, Environment and Health: The impact of the open dump in Brasilia-DF, Brazil			
Christian	Maduka	The Imperativeness of Citizen Participation in Water Governance	38	Stakeholder Participation	June 2nd 2017 9.00-10.30

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	RS#	RS TITLE	DATE/TIME/ ROOM
Muhammad Wasif Bashir	Babar	Multiple Stakeholders Role in Sustainable Water Sanitation and Hygiene Development in South Asia Region (A Case Study From Lahore Pakistan)	38	Stakeholder Participation	June 2nd 2017 9.00-10.30 Isla Mujeres
Carmen	Fernandez	Management and governance support to the Water Stewardship Initiative Water Fund - CuencaVerde (Medellin), Colombia			
Liber	Martin	Managing Water Resources in the Public Interest			
Carlos	Galdeano	Water availability assessment for hydraulic fracturing in Mexico	39	Water and Sustainable Growth: Water-Energy Nexus	May 29th 2017 17.20-18.50 Cozumel 3
Douglas	Aitken	Addressing decreasing water availability for the mining industry using cost-benefit analysis			
Gina S.	Warren	Modeling for Small Hydropower: Policy and Technology			
Sebastian	Riera	Political economy of energy subsidies for groundwater irrigation in semi-arid area in Argentina			
Fernando	Ortiz	Energy Efficiency as a Method to Improve Water Management Practices at the Local Level			
Bassel	Daher	Modeling the Water-Energy-Food Nexus: A 7-Question Guideline	40	Water and Sustainable Growth: Water-Food-Energy Nexus	June 2nd 2017 10.50-12.20 Cozumel 1
Liber	Martin	The water-energy-food nexus in Latin America and the Caribeean. Planning, legal framework and priority interconnections.			
Man	Yang	Using the Water-Energy-Food Nexus to Promote Sustainable Development and Combat Climate Change in the Mekong River Basin			
Dorice	Agol	The water-energy-food security nexus for trans-boundary water resources management of Lake Victoria Basin: A critical analysis of how science informs policy.			
D.L.	Marrin	Evaluating Consumer Choice in Conserving Water Resources Via Use of the Water-Energy-Food Nexus	41	Water and Sustainable Growth: Water-Food-Energy Nexus	May 31st 2017 10:50-12:20 Isla Mujeres
Clive	Lipchin	Solutions for Off Grid Food-Energy-Water			
Tamee	Albrecht	Water, energy, and food security: A comprehensive review of nexus methods			
Daniel	Gilmour	Decision Support Tools for understanding and managing the Water Energy Food NEXUS			

Regular Sessions

FIRST NAME	LAST NAME	ABSTRACT TITLE	RS#	RS TITLE	DATE/TIME/ ROOM
Ioannis	Chronis	An applied tool on Hydromorphology and River Restoration in the European Frame: A Greek Case Study	42	Water and Sustainable Growth	June 2nd, 2017 10.50-12.20 Cozumel 3
Manisha	Deb Sarkar	An urban river on a gasping state: Dilemma on priority of science, conscience and policy			
Feng	Hu	Water-Nomics of the Yangtze River Economic Belt: Strategies & recommendations for green development along the river			
Temur	Khujazarov	Water resources regulation and crops diversification analysis to solve tranboundary water sharing: case study from Zeravshan River Basin			
Tugce	Yildirim	Southeastern Anatolia Project (GAP) as a Case Study of a Regional Sustainable Develoopment Project			

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
MONDAY					
SS-13	Toward a Special Issue of Water International on the OECD Principles on Water Governance	Organisation for Economic Co-operation and Development	There is little debate that water policy making is most effective when informed by science, yet communication gaps and divides endure across communities of practices. To foster dialogue and put the "science-policy interface" into practice, the OECD and IWRA have partnered to develop a special issue of Water International focusing on governance. The special issue seeks to provide the scientific underpinning to the OECD Principles on Water Governance, which set 12 standards for effective, efficient and inclusive design and implementation of water policies. The special session will convene lead authors to share highlights from their articles for the special issue, and will gather economists, policymakers, scientists, legal experts, practitioners and engineers to engage in lively discussions on what makes water governance good or bad.	Theme: 4. Water policy and governance	May 29th,2017 15:30-17:00 Cozumel 2
SS-45	Water in the World We Want - policy and planning for accelerated SDG success	United Nations University; Korean Environment Corporation, the Ministry of Environment, Republic of Korea, and the United Nations Office for Sustainable Development	Achieving SDG 6 is about more than ticking off indicators. More ambitious, evidence-based and multi-sectoral policy frameworks are needed to meet water-related SDGs. However, this aim can leave decision-makers awash in a sea of complex data that are difficult to base coherent policy on. International policy making and policy implementation support is critical to progress, particularly in LMICs. Conveners propose six policy-critical components for water-related SDGs; discuss how countries can assess these components and use this assessment to plan for more effective policy implementation. Examples from Ghana and Tunisia will illustrate how innovations in policy can accelerate water-related SDG success.	Theme: 4. Water policy and governance	May 29th,2017 15:30-17:00 Coba
SS-49	Online Training Course on the "Greening" of Water Law: Implementing environment-friendly principles in contemporary water treaties and laws	International Association for Water Law (AIDA)	The Special Session will introduce the UN Environment "Online Training Course on the 'Greening' of Water Law: Implementing environment-friendly principles in contemporary water treaties and laws", developed by the International Association for Water Law (AIDA). An abridged version of the five modules will be presented by the respective authors, including a demonstration of the group exercises provided in the training course. The main topics covered in the course are the 'greening' of international and national water law, the principles of equitable and reasonable utilization, no significant harm and ecosystem protection, and the protection of aquifers.	Theme: 4. Water policy and governance	May 29th,2017 A: 15:30-17:00 B: 17:20-18:50 Cozumel 4
SS-56	Innovative water resources management and green development in China	General Institute of Water Resources and Hydropower Planning and Design at the Ministry of Water Resources of China	China special session will focus on problems and challenges we are confronted with in the sustainable use of water resources as water resources are getting increasingly stressed in the new period. Speakers ranging from officers from Ministry of Water Resources to well-known experts from China will introduce the innovative water management policies and measures currently implemented in China. Several international experts are also invited to attend the discussion "policies and scientific support for sustainable management of water resources".	Theme: 6. Water and Sustainable Growth	May 29th,2017 15:30-17:00 Cozumel 5
SS-63	The National Water Reserves Program in Mexico: allocation of water for the environment and accomplishment of multiple Sustainable Development Goals	CONAGUA, WWF-Mexico	The aim of the Program is to establish a system of water reserves focused on preserving the environment and ecosystems, giving support to all activities that are developed in them and strengthening the integrated management of water resources in 331 hydrological basins identified in Mexican territory. This Session presents the conception and implementation of the Program, showing its development as dynamic process involving the joint work of a large number of institutions, researchers and society. The results obtained have allowed it to acquire international recognition for being an innovative instrument to integrate the social assessment of water in the environment.	5. Water ecosystems and physical regimes	May 29th,2017 A: 15:30-17:00 B: 17:20-18:50 Xcaret
SS-18	Understanding water Security in cities: empirical evidence and policy implications	CAF–Development Bank of Latin America	Nearly 60 per cent of the world's people will be living in cities that cannot be sustainable without ensuring reliable access to safe drinking water and adequate sanitation. Coping with the growing needs of water and sanitation services within cities is one of the most pressing issues of this century. Sustainable, efficient and equitable management of water in cities has never been as important as in today's world. The seminar will discuss the empirical evidence emerging from the studies and the policy implications for the urban and water sectors.	Theme: 3. Water security in a changing world	May 29th,2017 17:20-18:50 Cozumel 5
SS-79	2nd Water Business Forum 2017	Korea Water Forum; Korean Ministry of Land, Infrastructure and Transport	We are at the beginning of a technological revolution that will fundamentally alter the way we interact with each other through global polity and development of diverse methodologies used for linkage between public and private sectors. In its scale, scope, and complexity, the transformation is becoming unprecedented. WBF 2017 in Cancun will provide an opportunity to create direction towards the new era of the fourth industrial revolution. This session will also offer a chance to share the insights of renowned water experts on the roles of cutting-edge technologies and well defined, developed policies in the process of this new movement.	Theme: B. Building capacity	May 29th,2017 17:20-18:50 Cozumel 2

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
TUESDAY					
SS-75	Peace for Water: The Global High Level Panel on Water and Peace's Vision	Secretariat of the High-Level Panel on Water and Peace	A group of 15 countries from all parts of the world launched the Global High Level Panel on Water and Peace at a ministerial gathering in Geneva in 2015. The mandate of the panel is to propose a global architecture to transform water from a source of potential crisis to an instrument of cooperation and peace. The aim of this Special Session is to present the activities and the main recommendations of the Panel which will be submitted to the United Nations and the international community in September 2017.	Theme: 4. Water policy and governance	May 30th, 2017 9:00-10:30 Cozumel 4
SS-10	Smart Water Management (SWM): Bridge to WGG & SDGs - the technological innovation needed for "Water for all"	Korea Water Resources Corporation	As global water challenges increase, the necessity for more systematic and innovative water management approaches now stands out as a critical global issue. SWM is a combination of existing water management practices with ICT technologies applied to the entire water cycle. SWM, which is a new instrument that integrates information and communication technology in all processes of water management, from source to tap, that can provide technological solutions. The objective of this session is to share potential and best practices of SWM as a new technological approach to achieve Green Growth and SDGs by promoting discussion on institutional innovation as an enabling condition.	Theme: 6. Water and sustainable growth	May 30th, 2017 9:00-10:30 Coba
SS-60	Capacity building in the water sector: Creating and developing training centers for water professionals	International Network of Water Training Centers	Significant investments are made annually in an attempt to bridge the remaining gaps in the management of water resources and water/sanitation services. These investments often fall short of expectations since the lack of skilled water professionals can result in either design faults in infrastructures or multiple deficiencies in the way these infrastructures are operated and managed. In a time of strong budget constraints, it is vital to optimize investments. This session will present the interest to create and develop training programs and training centers for water professionals to address the increasing demand for skilled professionals in water management.	Theme: B. Building capacity	May 30th, 2017 9:00-10:30 Xcaret
SS-71	Making investments on multi-purpose water infrastructure fit to finance	CAF–Development Bank of Latin America, and World Water Council	Multipurpose infrastructure (MPI) is very attractive due to the added value of providing energy and water services like water supply, irrigation, flood control, navigation and others, to harnessing economies of scale and scope. Nevertheless, this type of water infrastructure poses formidable policy and operational challenges. Finance, governance, and proper care of environmental and social concerns are cornerstones of MPI development. The seminar will discuss case studies focusing on project cycle of large-scale projects under climate change, and innovative financial mechanisms for MPI. A panel of experts will discuss their implications from the public policy perspective.	Theme: 6. Water and Sustainable Growth	May 30th, 2017 9:00-10:30 Cozumel 5
SS-27	Case Studies in the Challenges of Water Sharing Between "Upstreamers" and "Downstreamers"	St. Edward's University	There are challenges to responsible water sharing between "upstreamers" and "downstreamers" worldwide. Science must inform public policymakers; the only fair and reasonable public water policy is scientifically-based following integrated water management concepts. We explore issues in water security in general, we analyze an international case study of the Rio Grande's waters between the United States and Mexico, we dissect an intranational case study of Pecos River and Rio Grande River waters between New Mexico and Texas, and we examine water sharing issues in the conjunctive interface of water, agriculture, and energy from a local perspective.	Theme: 4. Water policy and governance	May 30th, 2017 15:30-17:00 Xcaret
SS-61	The Legacy of COP22: Implementing the Global Climate Action Agenda in the Water Sector	International Network of Basin Organizations	The Global Climate Action Agenda (GCAA) is a permanent global program to boost between the COPs cooperative action between governments, cities, business, investors and citizens to cut emissions rapidly and help vulnerable nations adapt to climate impacts. The water sector's contribution to the implementation of the GCAA is structured around four Global Alliances for Water and Climate: the Alliance of the basins ("Paris Pact"), the Business Alliance for Water And Climate change (BAFWAC), the Alliance of Megacities for Water and Climate Change and the Global Clean Water Desalination Alliance. This session will present their actions.	Theme: 3. Water security in a changing world	May 30th, 2017 15:30-17:00 Cozumel 5
SS-41	Water Security in the Americas	El Colegio de México and the consortium of the Hemispheric Observatory of Water Security	The America´s region has the 43% of the water in the world. The strategic managment of the water wil be important in the near future. the objective of the session is to present the importance of a strategic analysis of the water resources in the Americas, especially in some themes that are crucial for the region.	Theme: 3. Water security in a changing world	May 30th, 2017 A: 15:30-17:00 B: 17:20-18:50 Cozumel 4

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
TUESDAY					
SS-46	Building a Green Infrastructure Agenda for the Latin American Water Sector	Forest Trends	Green infrastructure – management of the ecosystems that provide and regulate water – is an indispensable complement to conventional "gray" infrastructure in achieving water security. One of the major barriers to scale for green infrastructure, however, is the ability to quantitatively estimate its hydrological benefits. This session will bring together engineers, policymakers, and environmental experts to highlight scientific innovations to support benefit quantification to support innovative policies and advance cross-sectoral efforts to address critical gaps in data, methodologies and capacities. Organizers: Forest Trends, Associacion de Entes Reguladores de Agua y Saneamiento (ADERASA), the International Water Association (IWA), and The Nature Conservancy (TNC).	Theme: 5. Water ecosystems and physical regimes	May 30th, 2017 17:20-18:50 Cozumel 5
SS-73	The First Asia International Water Week: Asia Solution for Water	Asia Water Council	Asia is home to 4.4 billion people, or more than 60 percent of the world's population. However, Asia is facing serious water challenges in terms of both quality and quantity due to climate change, urbanisation and population growth, which can be found in South America as well. Water stakeholders all over the world will be met in this session to share their insights and experiences for resolving the water problems in Asia as well as to introduce Asia International Water Week (AIWW), a platform to promote cooperation among the nations.	Theme: 6. Water and Sustainable Growth	May 30th, 2017 17.20-18.50 Isla Mujeres
SS-55	Shared Waters of North America	Natural Resources Cananda / Ressources Naturelles Canada; Univ. of Arizona, Water Resources Research Center, Natural Resources Canada; North American Research Partnership; Water Resources Institues of Texas and New Mexico; and Univ. of Arizona, Water Resources Research Center	"Shared Waters of North America" is a three-part Special Session that brings together water analysts and officials from the three countries of North America to compare approaches to binational water cooperation. First, speakers will consider scientific water resources assessment, with a particular focus on transboundary aquifers along the Canada-US and US-Mexico borders. The second segment will focus on transboundary water resources policies, including legal frameworks, mechanisms for cooperation, and water rights administration. The third and final segment will engage high-level policy makers and government officials in a discussion of their vision for future collaboration, including prospects for binational water management.water management.	Theme: 4. Water policy and governance	May 30th, 2017 A: 9:00-10:30 B: 15:30-17:00 C: 17:20-18:50 Cozumel 2
WEDNESDAY					
SS-76	Towards a Green Infrastructure in Latin America and the Caribbean	Inter-American Development Bank	Green infrastructure is an approach to water management that protects, restores and mimics the natural water cycle. It entails restoring wetlands or other nature-based solutions, rather than building costly new grey infrastructure. Green solutions give communities the ability to handle increased floods and droughts that come with global warming, as well as create jobs and supports supply chains and the jobs connected to them. In LAC, many forward-looking cities are already embracing this green infrastructure approach, including Santiago, Lima and Medellin. This seminar will discuss leading cases and opportunities for green infrastructure in LAC.	Theme: 6. Water and Sustainable Growth	31 May 31st, 2017 9:00-10:30 Cozumel 5
SS-26	Reflecting on Regulating Water Security for Unconventional Gas and Oil	Baker Institute for Public Policy, Rice University	This session seeks to advance understanding of regulatory and policy regimes around the world in relation to the use of water for shale oil and gas production. Regulatory and policy issues surrounding the water use for hydraulic fracturing are present at every stage of operations, requiring operators to understand the legal, political, and hydrological context of their surroundings. Speakers will examine who is fracing and where, water allocation, managing wastewater, and other water impacts, including public acceptance. Some of the research presented will be included in an edited book on water security in the context of shale production, currently in preparation.	Theme: 3. Water security in a changing world	31 May 31st, 2017 A: 9:00-10:30 Cozumel 2
SS-65	Water Security and Climate Change - Challenges and Opportunities in Asia	Asian Institute of Technology, Thailand); TUBS (Technische Universität Braunschweig, Germany), and THK (Technische Hochschule Köln, Germany)	The special session will provide a summary of key findings of conference "Water Security and Climate Change – Challenges and Opportunities for Asia". The reports cover the results of thematic sessions, special sessions and roundtable discussions identifying research demand. A further element will be a science policy dialogue with emphasis on relevance of the science agenda for SDGs and Paris agreement implementation. The expected outcome will be a short report with best practice examples on "solution based research" and "future research demand and formats" in the area water security.	Theme: 3. Water security in a changing world	31 May 31st, 2017 A: 9:00-10:30 B: 10:50-12:20 Xcaret

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
WEDNESDAY					
SS-35	Multi-disciplinary perspectives on the Grand Ethiopian Renaissance Dam (GERD) and the future of water resources management and development in the Eastern Nile Basin	Stockholm International Water Institute; Northumbria University, the University of Aberdeen, and International Center for Water Cooperation	This Special Session brings together researchers working on cross-disciplinary themes in the transboundary water resources management and development in the Nile River Basin. The session will focus on how a large--scale and symbolic hydraulic infrastructure such as the GERD can influence future directions in water resources management and development from multiple perspectives - technical, climate/environment, social, economic, legal, diplomatic and political. The presentations, based on recent developments and associated research, will lay the foundations for an in-depth facilitated discussion bringing together researchers and policy-makers.	Theme A: Bridging science and policy	May 31st, 2017 A: 9:00-10:30 B:10:50-12:20 C12:40-14:10 Cozumel 4
SS-77	Achieving Water and Sanitation SDGs in Latin America and the Caribbean	IADB, UNESCO-IHP, GWP, ANEAS, USWP and Ministry of Integration of Brazil	More than 150 million people in Latin America and the Caribbean (LAC) still do not have access to safe water and sanitation. The challenge for the region is to undertake and pursue a new set of Sustainable Development Goals (SDGs) where water is central to the challenge. A dedicated global goal on water, with targets to be achieved by 2030, has been established. While the new targets trigger a service universalization challenge, they go beyond access and emphasize the importance of guaranteeing service quality, sound wastewater management and adequate governance. The post-2015 development agenda is now entering a final phase. It is time to discuss how LAC will effectively implement, measure and monitor the new dedicated goal and targets.	Theme: 6. Water and Sustainable Growth	May 30th, 2017 10:50-12:20 Cozumel 5
SS-30	Social Sciences approach to supporting stakeholder engagement for water policy development	IWRA; French Water Partnership; French National Center for Scientific Research; French national alliance for environmental research; WGI initiative	Water-related representations and uses contribute to constructing the human relations to water, however they are still too little taken into account or misunderstood by decision makers and other donors, rending the implementation or the sustainable continuation of development projects difficult. Human and social sciences help this intercognition and the co-construction of projects, facilitating the projects' appropriation which is a factor of success for the implementation of the SDGs, Habitat III and the Paris Climate Agreement. This session aims to highlight and bring inputs to this reflection process through different case studies from all horizons, showing the territorial, cultural and socio-economic complexities and specificities.	Theme: A. Bridging science and policy	May 30th, 2017 10:50-12:20 Cozumel 2
SS-53	The Draft Articles on the Law of Transboundary Aquifers – Moving forward until the next UN General Assembly session	UNESCO, AIDA, and IAH Commission on Transboundary Aquifers	While the sustainable and efficient management of the 592 transboundary aquifers identified to date is recognized as critical for the success of the 2030 Agenda for Sustainable Development, still only six arrangements are specifically dedicated to transboundary aquifers. One critical tool in bridging the gap between science and policy-making and supporting states in setting appropriate arrangements for the management of their transboundary aquifers is the Draft Articles on the Law of Transboundary Aquifers. This session organized by UNESCO-IHP, IAH and AIDA brings together the science, law, policy-making to address the crucial interlinkages that can allow good governance of transboundary aquifers.	Theme: 4. Water policy and governance	May 30th, 2017 10:50-12:20 Coba
SS-48	Two Countries, Nine States: Colorado River Cooperation in a Complex River System	International Boundary and Water Commission, United States and Mexico Sections	The Colorado River Basin in the United States and Mexico covers 632,000 square kilometers and provides water to more than 2 million hectares of farmland and more than 40 million residents. After years of water scarcity, diverse interests in the basin reached agreement in 2012 on a 5-year pilot program under the auspices of the International Boundary and Water Commission, United States and Mexico, to address the challenges. A panel of scientists and policymakers will explain how that effort has laid the groundwork for a longer-term agreement.	Theme: 4. Water policy and governance	May 31st, 2017 A: 15:30-17:00 Cozumel 5
SS-16	What Next for Water Law and Policy? Recent Developments, Future Challenges and Potential Opportunities	Northumbria University Newcastle	The purpose of this special session is to capture some of the most recent trends and developments in water law and policy, both at a national, transboundary, regional and global levels; and to consider how water law and policy might have to evolve in order to address future water-related challenges or respond to advances in scientific knowledge and understanding. The session will draw upon the outputs of a recently published Handbook on Water Law and Policy (Routledge 2017), which reflects a collaboration amongst over 35 leading experts in the field, both academics and practitioners.	Theme: 4. Water policy and governance	May 31st, 2017 A: 15:30-17:00 B: 17:20-18:50 Xcaret
SS-21	Water security and global-change adaptation: bridging science and policy	El Colegio de Sonora; Inter-American Institute for Global Change Research; Collaborative Research Networks	The Objective of these sessions is to disseminate and apply innovative science and conduct influential science-policy dialogues through the perspective of water security in a manner that strengthens global-change adaptation in the arid1 Americas. They comprise to undertake river basin assessments, to document human and ecosystem exposure to hydro-ecological and globalization processes, and to conduct science-policy dialogues to diagnose current adaptive capacity and promote climate change adaptation. The sessions are organized the project: Innovative Science and Influential Policy Dialogues For Water Security in the Arid Americas, supported by the Inter-American Institute for Global Change Research (IAI -CRN3).	Theme: 3. Water security in a changing world	May 31st, 2017 A: 15:30-17:00 B: 17:20-18:50 Isla Mujeres

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
WEDNESDAY					
SS-25	Water Quality Management – identifying opportunities for policy reform	University of South Australia	Water Quality Management is a multi-faceted issue with clear nexuses to water quantity and involves both water for human consumption, industry and agriculture. The sessions will include seven papers presenting scientific information, predominantly from the social sciences, related to a range of water quality issues. Each presenter will provide key scientific findings which they consider represent policy challenges/opportunities or where policy reform is needed. The respondents and the subsequent discussions will focus on the policy dimension. This process is intended to inform an IWRA policy Brief on Water Quality Management.	Theme: 2. Water quality, wastewater and reuse	May 31st, 2017 A: 15:30-17:00 B: 17:20-18:50 Cozumel 2
SS-34	Bridging Stakeholders' Knowledge and the 8th World Water Forum Thematic Framework	World Water Council	The 8th World Water Forum organized jointly by the World Water Council (WWC) and Brazil, will take place in Brasilia in March 2018. Preparations are underway, and following the second Stakeholders Consultation Meeting, this special session will give the opportunity to all interested stakeholders to contribute to the development of the Forum's program. The meeting will gather the Forum's coordinators and other interested stakeholders to develop together the Forum's program at a more detailed level, guaranteeing linkages to other processes (i.e. Forum, SDGs, Implementation Roadmaps).	Theme: C. Stakeholder Participation	May 31st, 2017 A: 15:30-17:00 B: 17:20-18:50 Coba
SS-17	Empowering Young Water Professionals through Engagement in Global Water Community	World Youth Parliament for Water	World Youth Parliament for Water (WYPW) is a worldwide youth momentum to engage & empower young generation in water & climate change sector for inclusiveness of youth actions to meet SDGs 6&13. WYPW had been organizing youth activities during the XVIth World Water Congress at Cancun Mexico 2017 comprised of youth Session/Panel Discussion, Young Professional Booths, Signature Campaign & Interviews of senior's professionals and as Youth Rapporteur Team. These youth activities are a setup preparatory series for the 8th World Water Forum Brazil to ensure capacity building & youth involvement in sustainable water development to ensure the water secured world.	Theme: B. Building capacity	May 31st, 2017 17:20-18:50 Cozumel 4
THURSDAY					
SS-54	Water Futures and Solutions	International Institute for Applied Systems Analysis	This session will explore stakeholder´s views on water futures across sectors and countries in central and Latin America. The WFaS Initiative of IIASA is developing a series of communities of practice and regional hubs which builds on a successful global first phase of WFaS. The regional hub will focus on the co-design and implementation of assessing options for future water management (across sectors and between countries). Outcomes could be a report as well as a discussion at Congress. Particularly how the results and opinions expressed fit in with evolving the HLP on Water, the Paris Agreement and achieving the SDG's.	Theme: 3. Water security in a changing world	June 1st, 2017 9:00-10:30 Xcaret
SS-33	Resilience of coastal watersheds in Latin America and the Caribbean	Tropical Agricultural Research and Higher Education Center	Resilience assessment has been methodologically addressed, but we still lack specific tools, proved and quantified. In this session we will analyze the theoretical basis and science-policy bridge of resilience assessment. With this purpose we will present methodologies to assess vulnerability and ecosystem services for resilience analysis applied in coastal watersheds, but able to be used at any territorial scale. We will also present and discuss how good watershed management practices for mitigation and adaptation to climate change, as well as for productive purposes, contribute to build socio-ecological reslience of local communities in coastal zones.	Theme: 5. Water ecosystems and physical regimes	June 1st, 2017 A: 9:00-10:30 B: 10:50-12:20 Cozumel 5
SS-58	Training in Hydro-diplomacy: Legal and Institutional Aspects of Water Resources Governance – From the International to the Domestic Perspective	International Association for Water Law (AIDA); UNESCO-IHP	The UNESCO training manual "Hydro-diplomacy, Legal and Institutional Aspects of Water Resources Governance – From the International to the Domestic Perspective" (published 2016, available at http://unesdoc.unesco.org/images/0024/002452/245262e.pdf) will be illustrated and demonstrated. Mock classes on, respectively, the Trans-boundary Legal Perspective module of the Manual (chapter 2), dealing with international water law, and on the Bridging Perspective module of the Manual (chapter 3), linking international water law and domestic water law, will be conducted by the chapter authors. Classes will consist of a lecture followed by a group exercise with the Session participants. Certificates of attendance may be handed out at the end.	Theme: B. Building capacity	June 1st, 2017 A: 9:00-10:30 B: 10:50-12:20 Cozumel 2
SS-36	Water Stress and Demographic Dynamics	El Colegio de México; Colmex, UdeG and ITESM	Water is used inefficiently and now in the framework of climate change (CC) some areas and population groups will be strongly affected in their quality of life and wellbeing. We emphasize territorial differences in the availability and access to the resource in relation to the scales considered. We focus on two aspects of those changes: 1) Increase in water stress resulting from the necessary allocation of water to different consumptive uses, urban in particular; 2) Increased demand of water and sanitation services due to city sprawl. Relatively insufficient service coverage in quantity and quality affects health and wellbeing of users.	Theme: 3. Water security in a changing world	June 1st, 2017 10:50-12:20 Xcaret

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
THURSDAY					
SS-43	Hydropower Development and Reservoir Operation	Middle East Technical University	The sustainable use of water resources to maximize their potential benefits is a big challenge and currently hydropower generation constitutes a significant portion of these benefits. Being a domestic and renewable energy source, hydroelectric power has the additional advantage of acting as a large-scale energy storage alternative through pumped storage hydropower plants. Social and environmental objectives, climate change and political issues further complicate development of optimal operating policies. The objective of this special session is to gather researchers together to share their recent works on hydropower reservoir operation and to highlight challenging problems and future research topics.	Theme: 6. Water and sustainable growth	June 1st, 2017 10:50-12:20 Cozumel 4
SS-8	Charges vs. buyback: who pays for water ecosystems restoration?	University of Adelaide	Economic instruments cannot operate in isolation. We ask: what policy (mix) yields a (re)allocation of resources that maximizes welfare? This special session explores the characteristics of these instruments, their applicability in different contexts, and their transferability to the rest of the world. The speakers will debate: the necessary policy sequencing required when implementing instruments; provide real world contexts in their application; and highlight the potential pitfalls in their adoption. Expected outcomes from this session include: closer links to other researchers and policy-makers interested in this topic for future collaboration and project work. We also anticipate gaining useful insights into specific issues or case studies that could be included in this work as we seek funding and other support around topics related to this discussion.	Theme: 4. Water policy and governance	June 1st, 2017 17:20-18:50 Cozumel 4
SS-38	Water security issues for developing countries in changing environment	Institute of Geographic Sciences and Natural Resources Research (China)	Water scarcity, water pollution, ecosystem degradation are the major water problems in China also in the world. Water security means water supply security, water quality security, eco-water security and so on. China is the case to address all these water problem and water security related to social & economic development in the future. This section purpose is to address this issue and how science & technology and good water governance can give support for the solution of water security issue. This section would be one of special issue for water international in coming years. Several international experts most coming from China will be invited as key note presentation to address this issue on the social sciences approach to support stakeholder engagement for water policy development in China and also other developing countries in the world.	Theme: 3. Water security in a changing world	June 1st, 2017 17:20-18:50 Xcaret
SS-52	Offshore Aquifers – Why Should We Care?	UNESCO-IHP & University of Strathclyde	In a 2013 Nature magazine article, scientists highlighted the presence of major reserves of fresh and brackish water in continental shelves around the world, with reserves that could amount to 100 times the volume of water extracted from the Earth's subsurface since 1900. If confirmed, this phenomenon may potentially help addressing the "global water crisis". Vast offshore freshwater reserves raises complex issues regarding applicable legal regime(s), exploration, resource preservation, extraction, transportation, treatment. UNESCO-IHP and the University of Strathclyde are co-organizing this session to raise awareness of the existence and accompanying challenges of this potentially vast reservoir of freshwater.	Theme: 4. Water policy and governance	June 1st, 2017 17:20-18:50 Cozumel 2
SS-64	Toward an Integrated Water Management by Sub-basin: Mainstreaming of Science and Policy	COLEF	Only in the basin, it is possible to establish relationships between water availability and its uses, and it is where different demands and competing uses come together for formulating management alternatives. In this context, the panel will analyze alternative methodologies for water availability estimation and water economic valuation by type and use. It will also discuss advances and challenges in the implementation of the IWRM model in Mexico. Three hydrological subregions were studied at the north, center and south of Mexico with the objective of evaluating the relevance and viability of current water management practices.	Theme: A. Bridging science and policy	June 1st, 2017 17:20-18:50 Cozumel 5
SS-74	Getting to a Water Security Framework: Breaking it Down to Build it Up	Center for Water Security and Cooperation	A comprehensive water security framework can provide a clear, long-term vision for water management and governance. However, water is a complex resource with an intricate relationship to our lives and livelihoods. In this Special Session, we break down the concept of water security and engage participants in breakout discussion groups. After an opening panel discussion, participants will discuss focus questions on the concept of water security and its underlying nexuses. These discussions will be reported and published as part of the Center for Water Security and Cooperation's Water Security Challenge and offer a unique opportunity to influence the development of a water security framework.	Theme: 3. Water security in a changing world	June 1st, 2017 17:20-18:50 Cozumel 1
FRIDAY					
SS-5	Regulation and Transparency for Water and Sanitation Services in Countries That Lack Them	Instituto Mexicano de Tecnologia del Agua	To discuss needs and experiences about regulation for public water services. Those could range from social overseers, to proper regulatory watchdogs for tariffs and service quality. Will comment if those improve quality and reduce operation costs by benchmarking their supervised utilities. To comment if legislation for water services in some countries hinders or promotes the establishment of such regulators. The session will present cases and strategies to promote regulation and certainty and clarity of information about the performance of water utilities, with weak or lacking regulation and transparency.	Theme: 1. Water, sanitation and health	June 2nd, 2017 9:00-10:30 Cozumel 5

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
FRIDAY					
SS-11	Understanding the Forest-Water Nexus: a new global monitoring framework and tool	Food and Agriculture Organisation of the UN	Forests play a crucial role in the hydrological cycle, influencing water availability and quality, as well as reducing water-related risks such as landslides, local floods and droughts. Forested watersheds and wetlands supply 75% of the world's accessible freshwater for human and ecological needs. This special session will highlight the need to mainstream an integrated approach to forest and water resources management and policy. The occasion provides an opportunity to present a forest-water monitoring framework that is under development. Participants are invited to engage in a workshop to discuss the benefits of such a framework and how best to implement it.	Theme: B. Building capacity	June 2nd, 2017 9:00-10:30 Cozumel 4
SS-62	Towards SDG implementation – ensuring water quality from source to sea	IWRA and SIWI	This session will share experiences in addressing freshwater, coastal and marine water quality priorities at different scales from source to sea, and discuss water quality in the context of the SDGs. Local experiences from marine pollution in the Yucatan peninsula will set the scene for the session. Technical presentations will cover gaps and opportunities for coordinated water quality management from source to sea, and case studies related to micro-plastics. A panel will discuss needs and ways to maximize synergies in the SDGs when addressing water quality priorities. The session provides an opportunity to craft messages for the upcoming High-Level UN Conference to Support the Implementation of SDG14.	Theme: 2. Water quality, wastewater and reuse	June 2nd, 2017 9:00-10:30 Xcaret
SS-23	Enhancing irrigation productivity and profitability in small scale irrigation schemes lessons from three continents	University of South Australia; ACIAR (Australia); and IDRC (Canada)	This special session is about enhancing irrigation productivity and profitability for small-holder farmers, in Mozambique, Tanzania and Zimbabwe, India and Latin America. Soil moisture and nutrient monitoring tools were introduced to farmers in Mozambique, Tanzania Zimbabwe, and Punjabi to improve crop productivity. In the Sub-Saharan countries this was done in conjunction with the establishment of Agricultural Innovation Platforms (AIP) to connect farmers to markets and overcome other systemic problems. The theoretical underpinning of the tools and the AIPs will be outlined and research on their combined impacts will be discussed. This session is sponsored by ACIAR (Australia) and IDRC (Canada).	Theme: B. Building capacity	June 2nd, 2017 A: 9:00-10:30 B: 10:50-12:20 Cozumel 2
SS-42	The scientific underpinnings of global water law instruments: the UN Watercourses Convention, the UNECE Water Convention, and ILC Draft Articles on Transboundary Aquifers	Northumbria University Newcastle	The 1997 UN Watercourses Convection, the 1992 UNECE Water Convention, and the 2008 ILC Draft Articles on Transboundary Aquifers are all the outcome of political processes. However, each instrument, while legal, was informed to a great or lesser extent by science and scientific experts. The purpose of this special session is to compare how science underpins each of the aforementioned legal instruments, and what processes were in place (formal and informal) to engage scientific experts in their drafting. In addition, the session seeks to explore how contemporary science can help inform and strengthen the implementation of, and compliance with, the commitments set out in the instruments.	Theme: A. Bridging science and policy	June 2nd, 2017 A: 9:00-10:30 B: 10:50-12:20 Coba
SS-44	Sustainable watersheds: emerging economic instruments for water security	University of New Hampshire	This session explores emerging economic and financial instruments for enhancing water security worldwide in a changing climate, with a focus on understanding which instruments are the most suitable for a given watershed or basin. Emphasis will be placed on understanding the challenges and opportunities of developing effective economic instruments for improving water resource management. Specific initiative that will be addressed include national assurance schemes, water abstraction licenses, and payment for watershed services programs. Successful application of these instruments requires a deep understanding of the interactions and feedbacks between the human and natural systems that determine watershed sustainability.	Theme: 3. Water security in a changing world	June 2nd, 2017 10:50-12:20 Xcaret
SS-67	A "ts' ono' ot" cosmovision: Interdisciplinary science and policy in the Yucatan Peninsula's sinkholes	Department of Water Sciences at Centro de Investigacion Cientifica de Yucatan and the King's Water Activity Hub in the Department of Geography at King's College London	The Yucatan's iconic cenotes present a challenge – and opportunity – for water governance. The sinkholes' cultural, historical, and ecological value competes with the economic benefits of their overuse. Limited extant research joins the lack of a legal framework governing tourism and consumption. This session will use cenotes as a case study for how holistic research can inform policy. After a hydro-legal overview of the aquifer ecosystem, an interdisciplinary team will present results from speculative fieldwork considering what truly interdisciplinary research on the cenotes would look like. Participatory discussion will debate if and how researchers can produce integrated, policy-relevant water science.	Theme: A. Bridging science and policy	June 2nd, 2017 10:50-12:20 Cozumel 5

Special Sessions

SS#	Title	Hosting Institutions	Session Summary	Congress Theme	Date/ Time/ Room
FRIDAY					
SS-78	Introducing the World Water Data Initiative: How water data can help achieve the Sustainable Development Goals	High Level Panel on Water	This session will be the first time the World Water Data Initiative has been presented to the international water community. The session will include explanation of the features and purposes of the Initiative by the project leads, and will be supported by a panel discussion on implementation of the Initiative including the roles of international water agencies. The World Water Data Initiative is an outcome of the High Level Panel on Water, consisting of 11 sitting Heads of State and Government and one Special Adviser. The Panel was convened by the United Nations Secretary-General and President of the World Bank Group to provide the leadership required to champion a comprehensive, inclusive and collaborative way of developing and managing water resources, and improving water and sanitation related services.	Theme: B. Building capacity	June 2nd, 2017 10:50-12:20 Isla Mujeres

Poster Sessions

ID ABS	FIRST NAME	LAST NAME	ABSTRACT TITLE
37	Tara	Zolnikov	My walk to water
44	Bhishma	Karki	Water Rights: A key to sustainable development in Nepal.
72	Harshit	Jain	Modelling of Arsenic Concentration in Bengal Delta Plain and Predicting the case of Cambodia and Vietnam.
77	Dillip	Ghose	Estimation of Runoff from Precipitation and Prediction of Water table depth in scanty rainfall region Using BPNN and RBFN networks.
78	Li	Yan	The Discuss of Some Legal Question about the Pearl River Estuary River and Sea Boundaries.
83	Aldo	Castañeda	Governance of water resources in the Highlands of Jalisco, Mexico: the case of the microwatershed of Jihute in the municipality of Tepatitlan de Morelos.
95	George Ricardo	Andrade	Plasmon enhanced degradation of methylene blue via photocatalysis (solar and ultraviolet) and sonocatalysis using hetero-nanocatalysts based on ZnO and Au nanoparticles
100	Walter	Pardave	Estimation of Water Footprint of an industrial processing plant of gold minerals in the town of Vetas Colombia.
105	Samuel Dare	Fagbayide	Effects of Human Activities on Water Quality Assessment of Ala River In Akure, Ondo State, Nigeria.
114	David	Ortega-Gaucin	Critical Analysis of Communications Campaigns to Encourage “Water Culture” in Mexico
115	Maritza Liliana	Arganis Juarez	Determination of digital elevation model in a plain surface of Mexico using genetic programming and estimation of flood volumes
120	Ranjan	Sarukkalige	Assessment of Crop Water Requirements for Sustainable Agriculture in Western Australia
122	Prem	Rangsiwanichpong	Relationship between the probability of landslide and sediment yield in Thailand.
127	María Laura	Muruaga	Rivers of Tucuman Contamination by Vinasse Spills: Alternative to Reduce the Levels of this Pollutant and Promote its Uses.
129	Arvind	Lakshmisha	Collective action against water insecurity in peri-urban areas: learnings from the global south.
134	Luiz Carlos	Pereira	Impacts Caused by Substances Present in Electronic Waste in Your Contact With Water.
139	Natarajan	Pachamuthu	Sustainable Water Resources Development in Tamil Nadu, India Through Water Security Pathways
144	Alan	Sañudo	Pump shutoff and startup transient analysis in a well network.
151	Angélica	Vieira	Green synthesized copper nanoparticles into granular activated carbon of babassu coconut by Hibiscus Sabdariffa flowers for removal of nitrate
175	Natarajan	Pachamuthu	Achieving Permanent Water Security to Colorado Basin is a Dream, Without Transbasin Diversion from Mississippi River

Poster Sessions

ID ABS	FIRST NAME	LAST NAME	ABSTRACT TITLE
176	Jan	Macháč	Disproportionate cost assessment according to the WFD: Comparison of applications of two approaches in the catchment of the Stanovice reservoir (Czech Republic)
177	Jiri	Louda	How to Successfully Achieve Urban Adaptation Using Green and Blue Infrastructure?
185	Amrisha	Pandey	"Water Security" - through Techno-Sustainable Mechanism
207	Xinfeng	Zhang	The Mechanism of Salty Tide Intrusion in Pearl River Estuary and the Sustainable Use of Water Resources in Pearl River Delta
209	Daniela	Bitencourt	Sustainable Contribution: Consumer and Access of Freshwater
215	Gonzalo Daniel	Mejia Santana	Behavoir Pattern Models of the Monthly Rainfall Against Mean historical Temperature Undr Climate Change Scenarios
228	Muhammad Aslam	Khan	Deep-Seated Challenges to Water Sector and Human Life in Pakistan
229	Rosangela	Bergamasco	Graphene Associated with Nanomaterial for Pesticide Removal.
230	Rosangela	Bergamasco	Towards sustainable drinking water treatment - the use of natural coagulant in the removal of microalgae.
231	Rosangela	Bergamasco	Photocatalytic degradation of Methylene Blue (MB) dye under UV/visible light by TiO2 nanoparticle self-assembled commercial polyethersulfone ultramembrane.
234	Micael	de Souza Fraga	Study on the Self-Purification Capacity of the Piracicaba River, Minas Gerais State, Brazil.
242	Joo-Hyeon	Lee	Using Vegetation-Temperature-Precipitation Data from Satellite Products for Drought Monitor in Korea.
246	Angélica	Vieira	Adsorption capacity study of activated carbon of babassu coconut to remove yellow dye tartrazine from aqueous solution
253	Abdelaziz	Gherrou	Chromium recovery from electroplating rinsing waters using a novel metal exchange technology
279	Melih	Calamak	Effects of Burrowing Animals on Seepage Behavior of Earthen Dams
292	Carlos Alexandre	Burgos Garcia	Assessment of water quality using Principal Component Analysis: a case study of the açude da Macela, Sergipe, Brazil
293	Carlos Alexandre	Burgos Garcia	Assessment of water quality of the Nossa Senhora das Dores-SE reservoir
301	Yongnan	Zhu	Assessing the Impacts of Climate Change on the Water-Energy Nexus: Case study for Shanxi's energy bases, China
303	Juliana	Pinheiro Gomes	Sharing Water: water conflict management and building relations, the case study of the city of Brazlândia, Brazil - The Descoberto Basin
317	Teresita	de Jesús Mora Ortiz	Predicting the freshwater inflows into a coastal wetland: The Biosphere Reserve "Pantanos de Centla",Tabasco, Mexico
320	Sunghun	Kim	Comparison of methods for rainfall frequency analysis under climate change in the Han River basin, South Korea
325	George Ricardo	Andrade	Rapid detection of heavy metal ions in aqueous media based on fluorescent carbon dots obtained from beetroot

Poster Sessions

ID ABS	FIRST NAME	LAST NAME	ABSTRACT TITLE
331	Cristiane	Nascimento	Efficient sunlight driven photocatalytic degradation of organic dyes by CdS/bentonite nanocomposite
342	Fernando	Soares	Microbiological analysis of the ice marketed in Coari, city of Amazon state, Brazil
393	Alvar	Escriva-Bou	Accounting for Water in Dry Regions: a Comparative Review
403	Ajay	Kalra	Urban Stormwater runoff under changing climatic conditions
409	Toshiyuki	Moriyama	Making Smart Rainwater House
411	Haydeana Isabel	Navarro Solis	Identification Arsenic (V) by Cyclic Voltammetry and Recovery of Arsenic by Electrodeposition
422	Sara	Medrano Lucas	Participation and social capital for watershed management: Evaluation of Water Safety organisms in Lower Balsas (Michoacan)
441	Rebecca Annick Nireti	Lawani	Organic pollution of Oueme River in Benin Republic
442	Esra	Şıltu	Deriving Water Quality Based Discharge Limits: A Case Study for Gediz River Basin
447	Carlos Alexandre	Burgos Garcia	Environmental diagnosis of the aquifer free of the north zone of Aracaju-Sergipe through metal, ions and BTEX concentrations
456	Malay	Mukhopadhyay	Installation of Marker Stone to Restore River Source Water Infrastructure: A Newer Vista for Geomorphosite-geotourism
459	Marcelo	Fernandes Vieira	Biosorption Potential Evaluation of Atrazine by Moringa Seed Husks in Fixed Bed
460	Marcelo	Fernandes Vieira	Adsorption of Diclofenac on activated carbon and Moringa oleifera Lam.: Kinetic and equilibrium studies
467	Yoshiya	Touge	Study on Snow Melting Process in Land Surface Model in High Altitudes in Zeravshan River Basin
472	Rômulo Henrique	Teixeira do Egito	Water resources policy for the Brazilian semiarid region
473	Cunwen	Niu	Research on compensation of Hydrological project regulation for Eco-environmental flow Guarantee in the WEIHE River Basin, China
478	Kaoara	Batista de Sa	Increasing block rate tariffs and water conservation: a case study of individually metered dwellings in multi-storey buildings in the Federal District, Brazil
480	Nasir	Ahmed	Isotope Based Assessment of Deep Groundwater Resources for Sustainable Management in the Coastal Areas of Bangladesh - Crisis in Overexploitation and Salinization
486	Ramiro	Vallejo-Rodríguez	Water Quality Index of Lake Chapala in Mexico and its potential risk to public health
491	Romina	Battistella	Spatial Prediction of Arsenic on Groundwater Perforations of Santa Rosa Basin, Catamarca, Argentina
492	Alex	Godoy-Faúndez	Hydrometeorological risk assessment for crops in Chile
493	Carolina Alexandra	Perret	Assessment of surface water availability in the San Alberto watershed, Oxapampa, Peru
494	Carlos Alexandre	Burgos Garcia	Strategies for water quality reservoir assessment: Water Quality Index, Trophic State Index and Fuzzy Logic
507	Cristiane	Nascimento	Evaluation of the water quality in Sergipe hinterland reservoirs, Northeast Brazil.

Poster Sessions

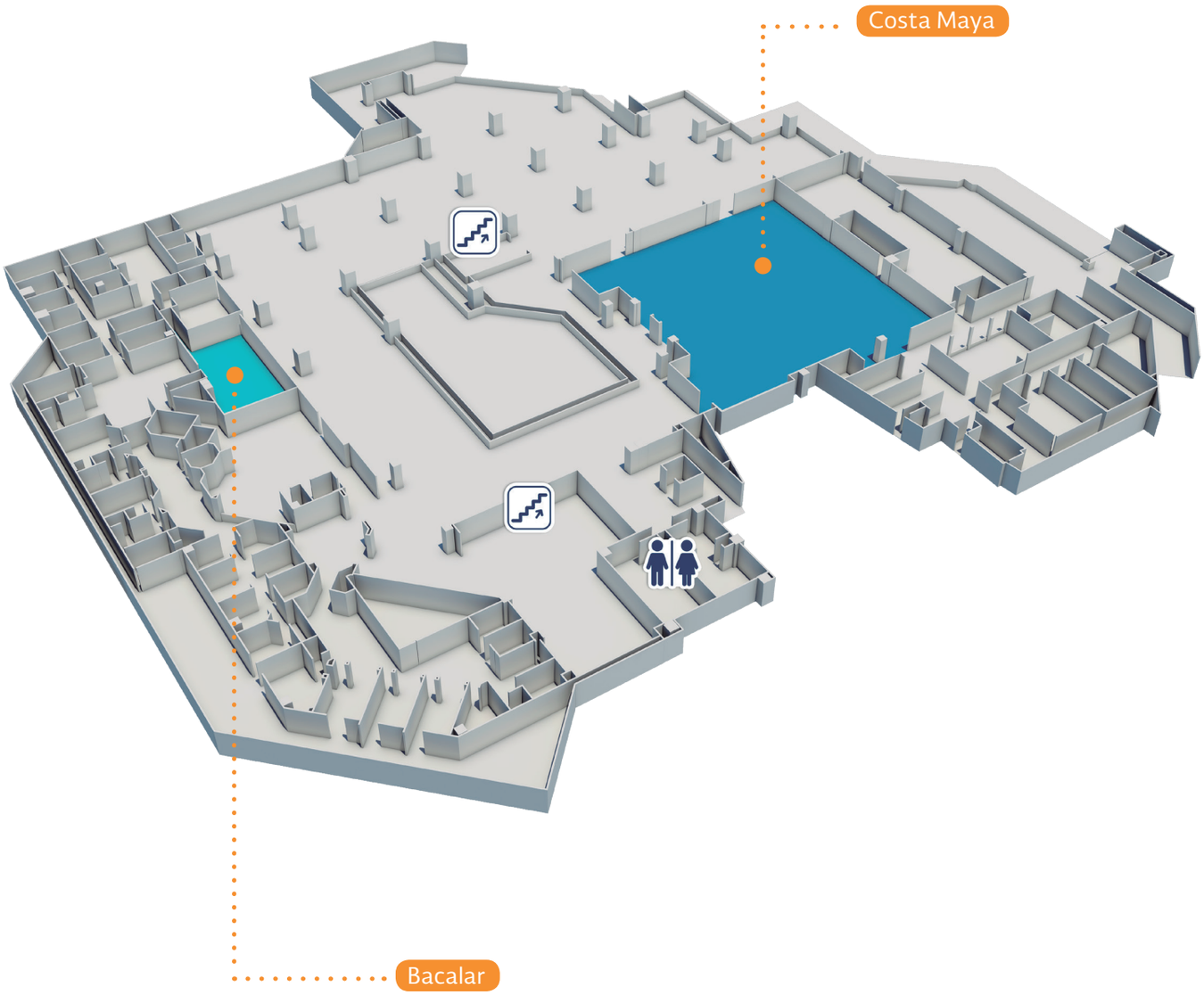
ID ABS	FIRST NAME	LAST NAME	ABSTRACT TITLE
508	Rafaella Oliveira	Baracho	Evaluation of Agenda 21 implementation in Brazil: Chapter 18 - Protection of Water Resources Focused on Drinking Water Supply and Sanitation case
510	Roberto	Ponce	Assessment of farmers' vulnerability to climate change at river basin scale: an integrated modeling approach
512	Josilene	Chaves	Evaluation of the seawaters influence in the lotic ecosystem Franquinho River in Archipelago Bailique, Amapa, Brazil
519	José Angelim	da Silva Neto	Anatomical Characteristics and Water Relations in Coffea Canephora L.
521	Arllon José	dos Santos Dias	Seawater influence on the mouth of the Amazon River: Water Quality Analysis and the impacts to a riverside community in the Amazon, Brazil
530	Hugo	Arangoitia Valladares	Nutrient removal of nitrogen and phosphorus in an artificial wetland subsurface flow under the influence of macrophyte Chrissopogon Zizaniodes
534	Roberto	Ponce	The Economic Value of Water in the Chilean Manufacturing Industry
536	Sebastian	Riera	Good water governance. Review of tools and indicators for successfull implementation.
540	Sajjad	Ahmad	Study of Potential Integrated Management of Water Resources in Las Vegas Valley
541	Romina	Battistella	Hydrochemical and spatial grouping of groundwater of Santa Rosa Valley, Catamarca, Argentina
543	Jeffrey	Cheng	Low Impact Development Benefit Quantification for Urban Stormwater Management
545	Carlos	Salazar	Flood frequency analysis in the New River Basin, Mexico
559	José Bento	da Rocha	Sharing water resources and water allocation
565	Judith	Ramos-Hernandez	Water reuse for irrigation as part of the wastewater management for the sanitation of the Atoyac River Basin, Mexico: an alternative from a hydraulic point of view
573	Marcia Araujo	Van der Boor	Microbiological Water Quality Monitoring That Fuels Hospitals Supply from Maranhão State Municipalities Alternative or Not
575	Elia	Tapia Villaseñor	The Transboundary Aquifer Assessment Program and the San Pedro River Aquifer Binational Report for the United States and Mexico
576	Cristina	Torres	Water Management in a High Mountain Community
588	Sofía	Garrido	Analysis fo the Physical and Chemical Properties to Improve Arsenic Sludge Dewatering and Disposal
592	Humberto	Silva-Hidalgo	Effects of Climate Change on Water Availability in a Hydrological Watershed Located in an Arid Region in the North-Central Portion of Mexico
594	Antonio	Gómez Arteaga	Numerical Model of the Netzahualcoyotl Dam Emergency Spillway and Hydraulic Validation Operation With the Physical Model

CANCUN CENTER

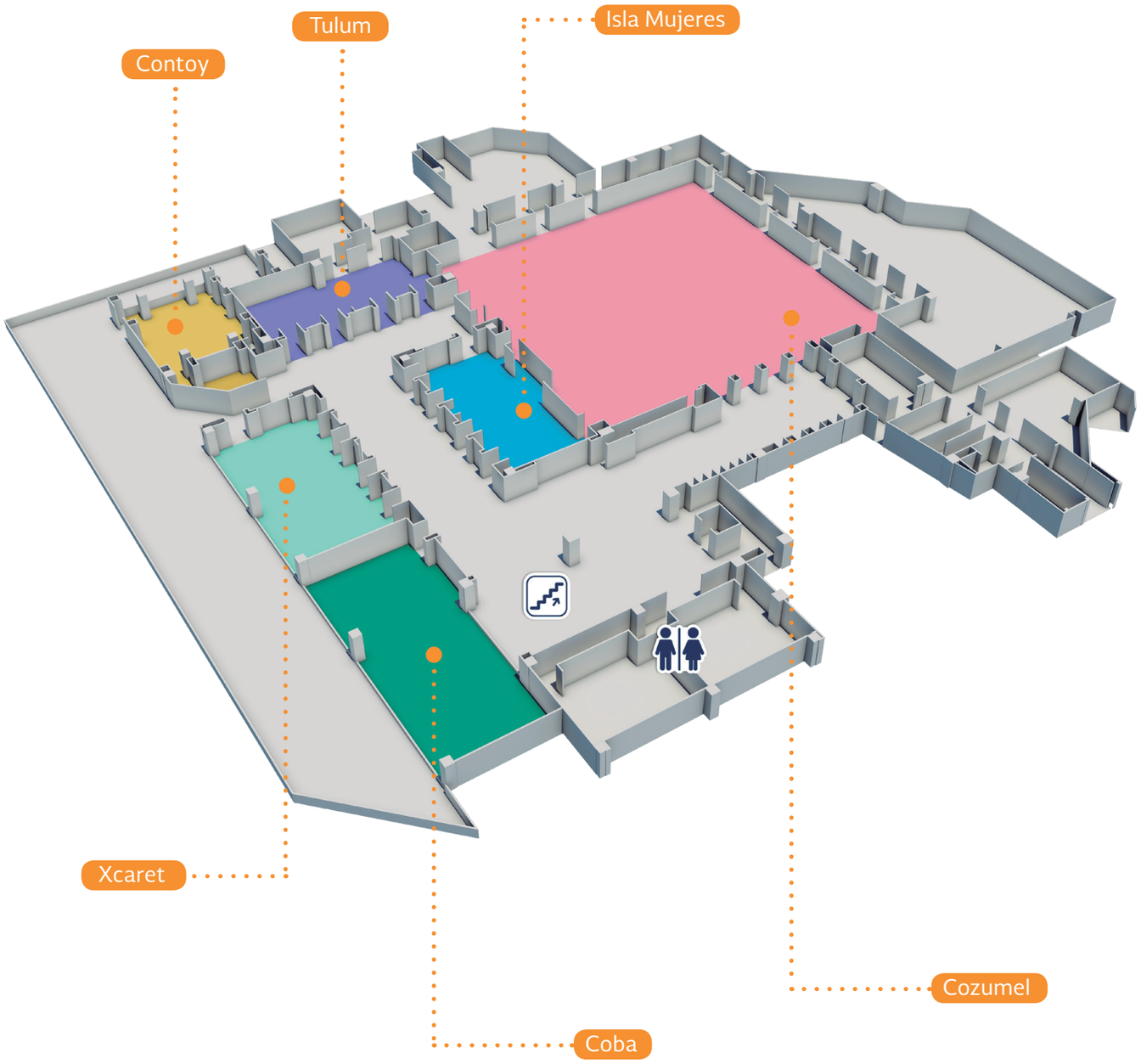
• VENUE •

The World Water Congress of the IWRA will be on May 29th to June 2nd in the Cancún Center (ICC).

First Floor



Second Floor



Third Floor